

ELECTROSTATIC DISCHARGE SUSCEPTIBILITY DATA

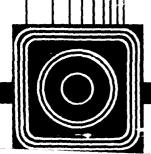
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Ordering No. VZAP-2

ELECTROSTATIC DISCHARGE SUSCEPTIBILITY DATA OF MICROCIRCUIT DEVICES

Volume I 1989

Prepared by:

William H. Crowell Reliability Analysis Center

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PREFACE

The purpose of this document is to make available electrostatic discharge (ESD) susceptibility test and classification data. This data is much needed by industry and government equipment designers to enable them to assess their equipments' vulnerability to the ESD threat, to assist in the establishment of ESD control programs, and to comply with such requirements as MIL-STD-1686A, "Electrostatic Discharge Control Program for Protection of Electrical and Electronic Parts Assemblies and Equipment (Excluding Electrically Initiated Explosives Devices)."

This document was prepared as part of the Reliability Analysis Center's efforts to provide its user community with new and needed information in the field of electronic device reliability.

Contributing to this effort were William Denson, David Mahar, John Puleo and Shawn Gentile.

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SECTION 1.0

INTRODUCTION

1.0 INTRODUCTION

This databook makes available ESD susceptibility test data that the RAC has collected from a variety of sources over the past few years on integrated circuits, discrete semiconductors and resistors.

The introductory material of this publication is not intended to provide a tutorial on ESD testing or the physics of ESD failures, but rather to provide enough information to allow the user of this document to effectively interpret the presented data. This information will also give the user some insight into the usefulness and limitations of the data.

1.1 BACKGROUND

When VZAP-1 was published in 1983, ESD was a relatively immature field with a serious lack of standardization, especially in the area of ESD susceptibility testing. Much of the VZAP-1 data was taken with non-standard ESD simulator circuits that deviated from the use of a 100 pF, 1500 ohm discharge model. Additionally, it was discovered subsequent to VZAP-1 that many of these simulators, either commercially available or built in-house, have low degrees of repeatability, due to many uncontrolled variables. Although many of the reasons for this nonrepeatability have been studied, understood, and corrected, there potentially still exists sources for large degrees of variation in the test results. A discussion of typical variability that exist in test results is given in Section 1.5

VZAP-2 is intended to be an update to VZAP-1, and presents more data of higher quality. These improvements are possible because much has been learned in the field of electrostatic discharge since VZAP-1 was issued.

1.2 USE OF THIS DATA

MIL-STD-1686A covers the requirements for the establishment and implementation of an ESD control program, including identification of ESD Sensitive (ESDS) parts, assemblies, and equipments. Any organization that designs, tests, inspects, services, manufacturers, processes, assembles, installs, packages, labels, or otherwise handles electronic parts, assemblies, and equipment susceptible to ESD damage should consider implementation of an ESD control program.

The first consideration in establishing an ESD control program in a specific application is the identification of the susceptibility levels of the specific parts being used. This is true whether the program is being implemented as a result of MIL-STD-1686A or not. Based on this information, an effective program can then be designed and implemented without expensive overkill.

MIL-STD-1686A, Paragraph 5.2 states, "The contractor shall identify each ESD Sensitive (ESDS) part, assembly, and equipment applicable to the contract as Class 1 or 2." In some cases Class 3 parts must also be identified. Paragraph 5.2.1.1 further states "ESD sensitivity classification for parts shall be determined as follows:

- (a) ESD sensitivity as specified in the applicable part specification, or
- (b) ESD sensitivity in accordance with Appendix A test data contained in the Reliability Analysis Center (RAC) ESD Sensitive Items List (ESDSIL), or
- (c) Classified in accordance with Appendix B, or,
- (d) When specified, or at the option of the contractor, determine sensitivity by test (See Appendix A). ESD sensitivity test data reporting shall be in accordance with the data ordering document included in the contract or order (See 6.2)."

The data contained in this databook is essentially a compilation of ESD test data taken from a wide variety of sources. The ESDSIL database referred to in item (b) above is entitled the "Electrostatic Discharge Sensitive Items List." The intent of the ESDSIL database is to be a central repository of data taken as a result of the requirements of MIL-STD-1686A and Data Item Description (DID-RELI-80670). The classification test procedure of MIL-STD-1686A, Appendix A, requires the use of the test circuit of MIL-STD-883, Method 3015. At the time MIL-STD-1686A was issued the MIL-STD-883 test method in effect was Method 3015.6. Since there is no data in this publication which resulted from testing as required by Method 3015.6 or later, the data contained herein does not fulfill the requirements of (b) above.

However, the data in this publication is more desirable than the use of (c) above which generically classifies components based on part type. Since 3015.6 was the first MIL-STD-883 ESD test method to ensure reasonable confidence in test waveform characteristics, it is the most desirable test data available. The data types, in order of preference, can be summarized as follows:

- 1) MIL-STD-883, Method 3015.6 or later
- 2) MIL-STD-883, Method 3015.5 or earlier, or other 100pF, 1500 ohm Human Body Model (HBM) tests, such as DOD-STD-1686
- 3) Non 100pF, 1500 ohm HBM tests converted to an ESD susceptibility level consistent with the 100 pF, 1500 ohm model
- 4) Electromagnetic Pulse (EMP) data converted to an ESD susceptibility level.

The data contained in this document are from items 2, 3 and 4. This is also the order of preference which was used in determining the ESD classification of each part listed.

A more detailed description of the test method used for each data entry is given in the remarks field of Section 3 and also in Section 5 (Volume II) of this document.

Before the updates of DOD-STD-1686 to MIL-STD-1686A and MIL-STD-883 Method 3015.5 to 3015.6, there were inconsistencies between DOD-STD-1686 and the MIL-STD-883 method of reporting ESD test results. Specifically, the voltage susceptibility ranges were different, making it impossible to cross-correlate test data. Both MIL-STD-1686A and MIL-STD-883, Method 3015.6 have been coordinated, thereby making data taken from either useable for either purpose. In fact MIL-STD-1686A invokes the procedure of MIL-STD-883 Method 3015.6. The classification ranges in these documents are as follows:

Class 1	0-1999
Class 2	2000-3999
Class 3	4000-15999

This is the classification scheme that is used in this publication. In addition to these, RAC has defined Class N to mean devices susceptible to levels above 15999 volts.

Since much of the data in this publication was obtained from tests performed not in accordance with MIL-STD-1686A or MIL-STD-883, classification in accordance with these standards becomes difficult. For example, if testing was performed that yielded devices passing a test at 1000 volts but failing the test at 3000, although it is known that the susceptibility level is 1000-3000 volts, the MIL-STD-1686A classification cannot be precisely determined. In this example it is not known whether the device is Class 1 or 2. The classification criteria used in this publication was to use the lowest failure voltage or the highest voltage at which the device passed if

no failure data existed. For example, if a device was observed to fail when tested at 2000 volts only, it was classified as Class 1 since the actual threshold voltage is between 1 and 2000 volts.

As stated previously, all data present in this document was not taken from specific test methods, such as method 3015 of MIL-STD-883 but rather from a variety of test methods. Contained in this document are the results of tests done in accordance with MIL-STD-883, test method 3015; tests similar to MIL-STD-883 Method 3015 but not strictly in accordance with it; tests using nonstandard simulation models and methods; and EMP data that was converted to reflect ESD susceptibility levels. The EMP data was only used for classification purposes in the cases in which there was no other empirical ESD susceptibility data. The methodology used to convert EMP data to ESD susceptibility levels is given in Section 1.5.

In future revisions to this publication, it will be interesting to note the differences in ESD susceptibility data between Method 3015.6 and earlier versions in which the waveform was not tightly controlled. However, in general data taken from circuits in which the high frequency (i.e. > 100 MHz) performance has not been characterized will lower failure thresholds. This potential exists due to the fact that there can exist high frequency, high amplitude oscillations in some circuits which yield higher stressing amplitudes than that of the ideal RC discharge waveform.

Additionally, there is a limited amount of Charged Device Model (CDM) test results. Even though CDM tests are not yet incorporated into the ESD testing standards, there has been some data included which were taken using this model. Although the device classification schemes are only applicable for the HBM, the CDM data that was available is included for completeness, considering that conventional classifications with CDM data cannot be done.

Individuals or firms testing devices for ESD susceptibility are encouraged to submit the resulting data to the Reliability Analysis Center for inclusion into the database. If desired, the source of data will be held proprietary by RAC. This data does not need to be taken in accordance with the MIL-STD-883 test method, but can be any empirical ESD susceptibility data. A recommended format for this data is given in Appendix B (Volume II). Also given in Appendix B, for information purposes only, is the Data Item Description (DID) DI-RELI-80670 called out in MIL-STD-1686A for submission of ESD sensitivity data.

1.3 INTERPRETATION OF DATA

The data contained herein is intended to present the results of empirical tests performed. Ideally, in addition to voltage susceptibility levels, one would like to know specific failure mechanisms that caused the device to fail. While manufacturers typically know the manner in which their part will fail when exposed to an ESD transient, this data is not normally available to outside organizations. Therefore, the specific failure mechanisms are not known. What is usually known is the failure mode (that is, the measurable effect of damage), since in any ESD test there must be a means of detecting failure. Examples of typical failure modes (or failure criteria) included excessive input leakage, input stuck high, functional failure, etc.

The failure criterion used in establishing an ESD failure is critical to the outcome of the testing. This may be illustrated by the use of two examples. In the first example, let us assume that the failure criterion for a bipolar device is defined as a certain percentage change in leakage current. This may be a difficult failure criterion to implement, because the relationship of leakage current versus stress voltage itself is not well-defined. In the second example, let us assume that the leakage current specification limits are used as the failure criterion for the same parts. The device which we are testing is relatively tolerant to ESD and remains within the specification limits when stressed with a pulse well below the damage threshold. Nevertheless, there is a measurable change in the leakage current, i.e., the device has been degraded; however, it does not exceed the specification until it is subsequently pulsed with a much higher energy pulse. Since we know that some degradation has occurred, we can measure the degradation, but, because of the failure criterion, the device is not considered susceptible to ESD damage at the lower level. For this reason, the criterion used to detect device failure must also be selected in accordance with the device operating characteristics and the manner in which the device is designed into a circuit; that is, if a certain circuit configuration can tolerate a parameter shift or even an out-of-specification condition of this component. Since it is impractical to require unique failure criteria based on the manner in which the part is used in the circuit, MIL-STD-883, Method 3015.6 states the devices shall be tested for failure following stressing by performing room temperature DC parametric and functional tests. Performing both parametric and functional tests should identify any degradation or failure of the device.

It is also recognized that failure modes and mechanisms are highly dependent on the simulation circuit used to stress the device. There are various circuits being used in industry to simulate different ESD scenarios. The most standard of these is the Human Body Model, in which a charged capacitance is discharged through a resistor to the device under test. This Human Body

Model is the most commonly used simulation model and is specified in MIL-STD-1686A and MIL-STD-883 Method 3015. The resistance and capacitance values specified in these standards are 100 pF and 1500 ohms, respectively. Other values are often used and some data in this publication use these values. The values used are listed in the detailed data (Section 3.0). It should be noted that devices can exhibit different susceptibility characteristics depending on the values used. Since there is a need to classify devices in a consistent manner, the RAC derived a conversion method for data that was taken using a Human Body Model with resistance and capacitance values other than 100 pF, 1500 ohms.

Using semi-empirical methods, the RAC has established the following formula for the conversion:

$$V_1 = V_2 (3.87) \sqrt{\frac{C_2}{R_2}}$$

where:

 V_1 = standard human body model damage threshold

 R_2 = nonstandard value of resistance used (in ohms)

 C_2 = nonstandard value of capacitance used (in pF)

 V_2 = measured damage threshold using C_2 and R_2

The derivation of this equation may be found in Appendix A.

This method is only used so that a classification in accordance with the susceptibility levels of MIL-STD-1686A can be made. The data in Section 3.0 presents both the classification of each part and the data as it was obtained, i.e., the failure voltages of the actual model used during testing.

Other ESD simulation models sometimes used are the charged device model and the machine model. The charged device model simulates the situation in which a device, after being charged, contacts a conductive object, thereby causing a high amplitude, short duration discharge pulse. The machine model simulates a situation in which a device is contacted with a charged capacitance through a very low resistance. This model is intended to simulate a conductive object, like parts of a machine, that contact the device.

The purpose of this book is not to provide background on the physics of ESD failures, as this has been done extensively in the literature, but rather to present the data collected by RAC and give the reader enough information so that the limitations of the data are fully understood. If

further information is required, DOD-HDBK-263, "Electrostatic Discharge Control Handbook for the Protection of Electrical and Electronic Parts, Assemblies, and Equipment (Excluding Electrically Initiated Explosive Devices)" and the proceedings of the Annual EOS/ESD Symposium provide much information on all aspects of ESD.

1.4 CONVERSION OF EMP OVERSTRESS TEST DATA TO THE ESD HUMAN BODY MODEL

A vast amount of electrical overstress data has been compiled from Electromagnetic Pulse (EMP) studies. It would be negligent to disregard this potential data source. By knowing certain parameters of a device, a theoretical ESD failure can be calculated using the Wunsch-Bell model (Reference 28) as the starting point. The following equation has been established to convert EMP overstress data to the ESD human body model equivalent:

$$V = \left[\frac{-2V_D + \sqrt{4V_D^2 + 1200 K_1 (7.675 \times 10^{-7})^{-K_2}}}{60} \right] 1530 + V_D$$

where:

V = ESD threshold voltage

V_D = measured overstress breakdown voltage

 K_1 = failure constant 1

 K_2 = failure constant 2

The derivation of this equation may be found in Appendix A (Volume II).

To further verify the validity of the calculated ESD levels presented in this book, data was compared for specific devices which had both empirical ESD threshold data and ESD threshold levels calculated from EMP data. The log of the ratio of ESD to EMP failure voltages was plotted such that a given percentage of discrepancy (i.e., if the EMP level was the same percentage higher or lower than the ESD level) would be equidistant from the 0 line. Figure 1 is a histogram illustrating the relationship between the $\log{(\frac{EMP}{ESD})}$ and frequency of occurrence. If the datapoints were randomly distributed about the 0 line and the data did not show a shift in distribution against any parameter, it could be concluded that the failure levels obtained from EMP data were a fairly good indication of the actual susceptibility levels of the devices (not taking into account random

variations and noise in the data for any given device). Analysis of this data however, indicated that the $\log \left(\frac{EMP}{ESD}\right)$ datapoints were not randomly distributed but rather correlated to the susceptibility level. This indicates that the conversion algorithm is not perfectly accurate.

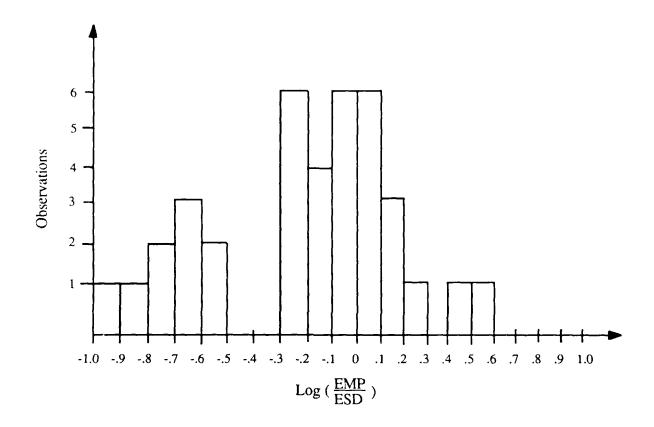


FIGURE 1: EMP VS. ESD DATA

Based on this information it should be emphasized that the ESD susceptibility levels obtained from EMP data are necessarily only approximate values. It can be seen from Figure 1 that the EMP to ESD levels can differ by as much as a factor of 10. There are various sources of error in converting EMP data to ESD data. Two of these error sources are the uncertainty in the damage constants and the uncertainty in the device parameters (bulk resistance and breakdown voltage). These uncertainties can stem from normal lot to lot variations and differences among manufacturers. Additionally, it is known that damage from EMP test pulses may manifest itself as different failure mechanisms than damage from an ESD pulse. This is due to the fact that an ESD pulse may be a shorter duration, higher current pulse relative to an EMP event. These variations can easily cause a factor of 10 difference in the susceptibility levels. For this reason, EMP data is used in this publication for classification purposes only in those cases where ESD data

is not available. The EMP data is identified as such in the remarks field (field no. 18) of the detailed data section.

1.5 VARIABILITY ASSOCIATED WITH CONVENTIONAL TEST METHODS

Since ESD testing began, it has been recognized that there was a certain degree of variability in test results due to the test apparatus itself. These variations were attributed to:

- Arcing of the high voltage switching relay.
- Errors in calibration of the test voltages.
- · Leakage of the capacitor.
- Parasitic inductances and capacitances.
- Inconsistencies in the criteria used to detect failure.
- Incomplete characterization of worst case pin combinations.

Conventional ESD simulators probably effectively simulate a real ESD event from a charged person or object, since a real ESD would have many of the parasitic R, L, and C values similar to that of the simulator (Reference 8). The problem is, however, that the discharge waveform produced is uncontrolled and cannot be used to obtain repeatable results.

To illustrate the repeatability of tests using a conventional circuit, Figures 2 and 3 present the data RAC has taken from two different conventional ESD simulators. A sampling of 74LS08 devices were obtained of the same date code, attempting to minimize variations in the device under test population. The most susceptible pin was found by step stressing a small sample of devices on each pin until failure. Failures were detected with a curve tracer indicating a change in reverse breakdown voltage characteristics between the pin under test and the substrate of the device.

Once the most susceptible pin was found, a sampling of 30 devices were step stressed to failure on this pin for each of the two simulators. Voltage step increments of 25 volts were used to maximize the resolution of failure voltage distributions. The intent of the study was to:

- (1) Determine the failure voltage distribution of a typical device stressed with a conventional test apparatus.
- (2) Identify differences in these distributions between two typical simulators.

Another study (Reference 26) with similar objectives yielded even a higher degree of variability. In this study, a sampling of 74F04 and 74F175 devices were tested by three independent test labs. Figures 4 and 5 summarize these results.

These results were taken when ESD testing technology was less mature and testers were being built with little regard for the subtleties involved in making an accurate and repeatable test circuit. Since the data contained in this publication was obtained from a variety of testers, it is apparent that this inherent variability is present in it.

In addition to the inherent variation in test apparatus and devices themselves, there can also exist large variations between manufacturers. This is due to the fact that each manufacturer employs their own unique methodologies and circuitry to protect devices, each with their own protection capability. If the manufacturer was known, it is reported in the detailed data section of this publication.

1.6 SUMMARY AND CONCLUSIONS

This publication presents the most comprehensive compendium of electrostatic discharge susceptibility test data currently available. This data is useful (and mandated by MIL-STD-1686A) for the establishment of ESD control procedures based on the susceptibility of devices being handled, assembled, stored, etc. It is important for the users of this information to understand the limitations of the data contained herein. To accomplish this, previous discussions have addressed the different types of data included in this publication as well as the variation inherent in it.

RAC also strongly encourages any one performing ESD susceptibility tests to submit the results of those tests to RAC for inclusion in the database and dissemination in future editions of this publication. If tests are performed in accordance with MIL-STD-1686A, the results are required to be submitted to RAC as outlined in the Data Item Description DI-RELI-80670 (given in Appendix B, Volume II). Also, given in Appendix B is a format for submitting data if not done in accordance with a specific test method.

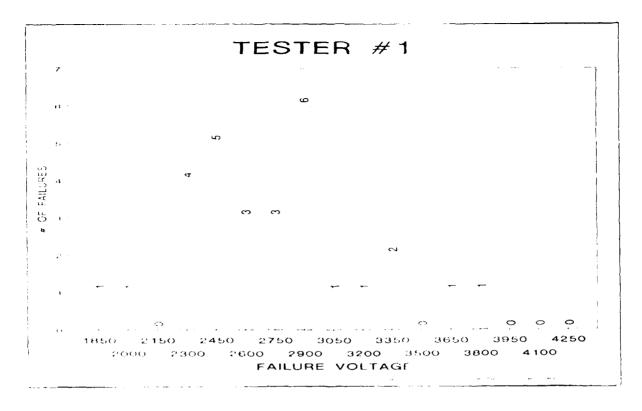


FIGURE 2: FAILURE DISTRIBUTION FOR TESTER #1

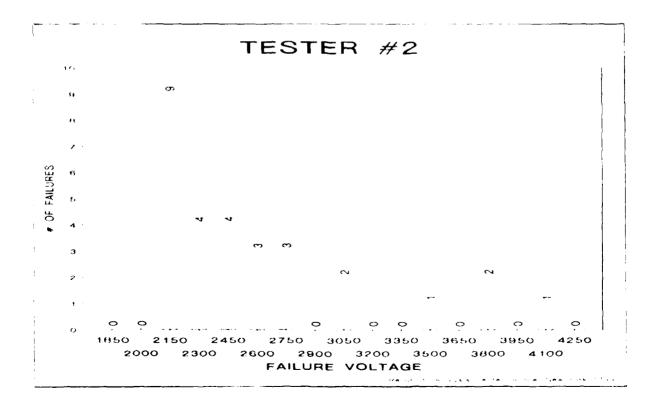


FIGURE 3: FAILURE DISTRIBUTION FOR TESTER #2

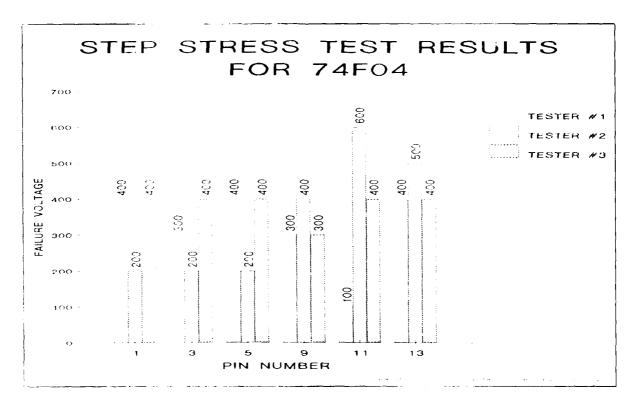


FIGURE 4: STEP-STRESS RESULTS FOR 74F04

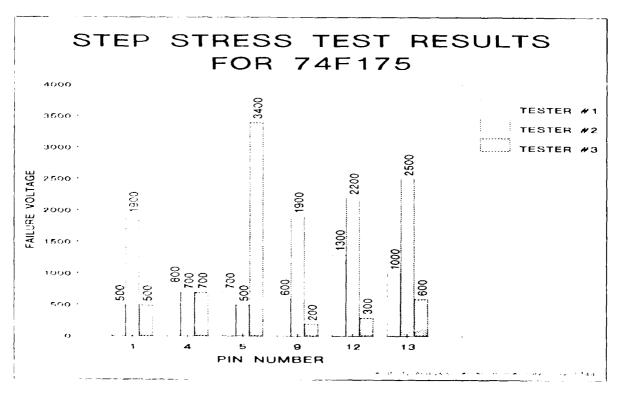


FIGURE 5: STEP-STRESS RESULTS FOR 74F175

SECTION 2.0 FAILURE VOLTAGE PROFILE

2.1 SUSCEPTIBILITIES OF VARIOUS TECHNOLOGIES

The relative susceptibilities of various technologies can be seen from the following histograms (Figure 6 through 35). Cases where there are large peaks in the histogram are indicative of a particular data source or test method. For example, the peaks at 1000-1499 volts for CMOS, 2000-2499 volts for TTL, 1000-1499 volts for STTL, etc., were primarily from data contained in Source Code 030 (Section 5.0). However, when observing the histogram (Figure 19) for failure voltages of all microcircuit technologies combined, a much larger sample size was available and a fairly well-defined curve was obtained.

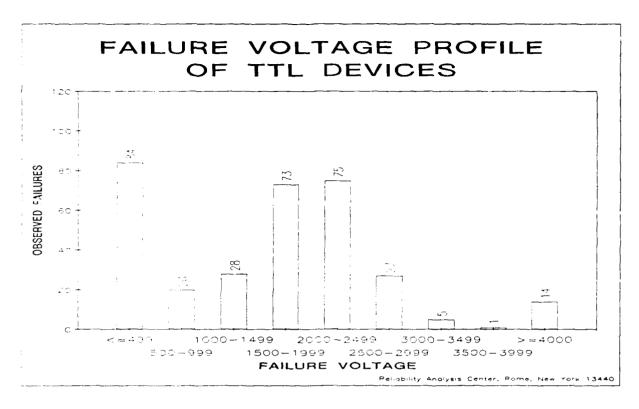


FIGURE 6

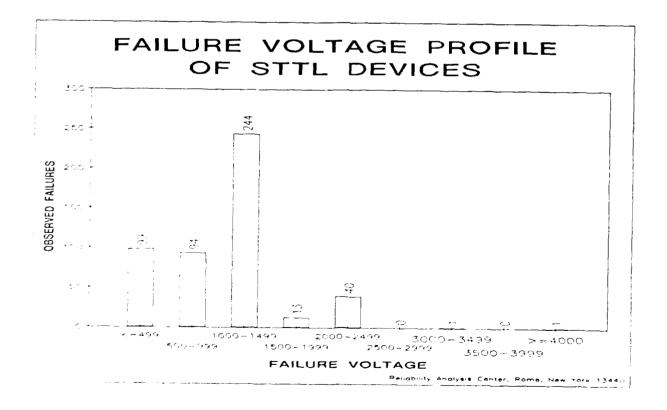


FIGURE 7

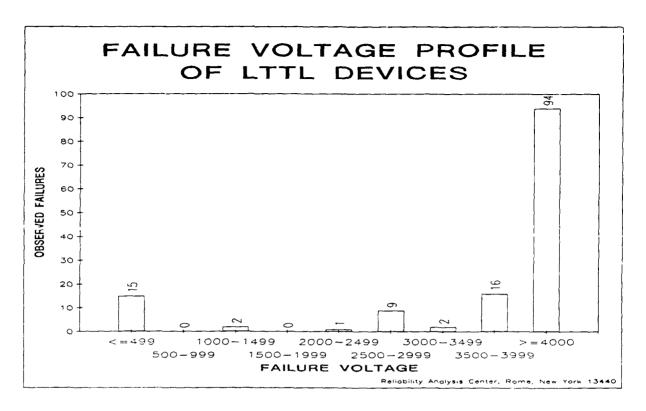


FIGURE 8

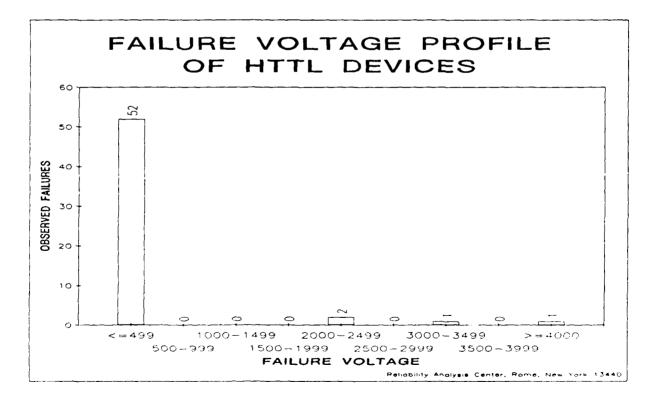


FIGURE 9

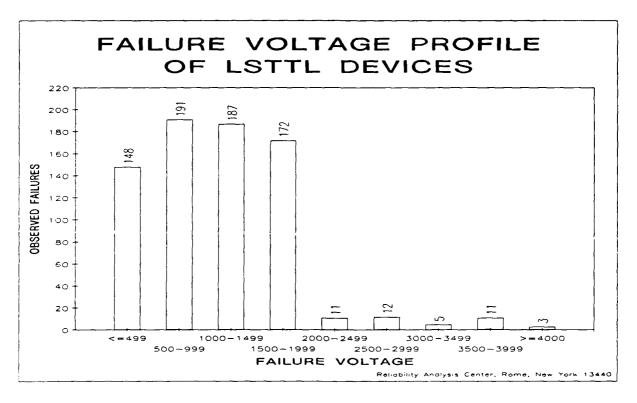


FIGURE 10

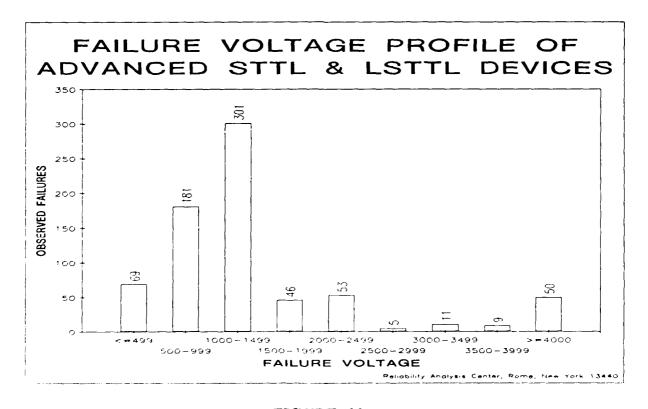


FIGURE 11

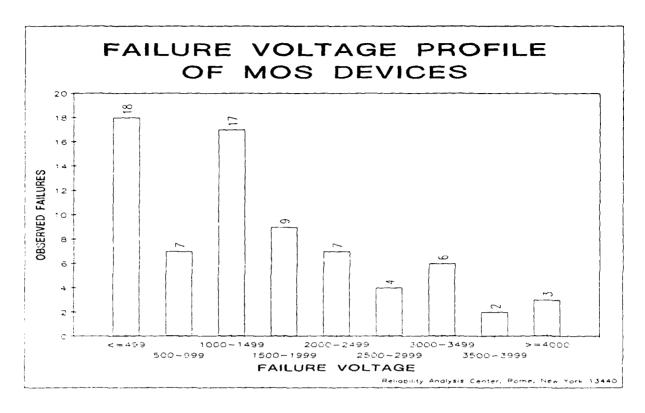


FIGURE 12

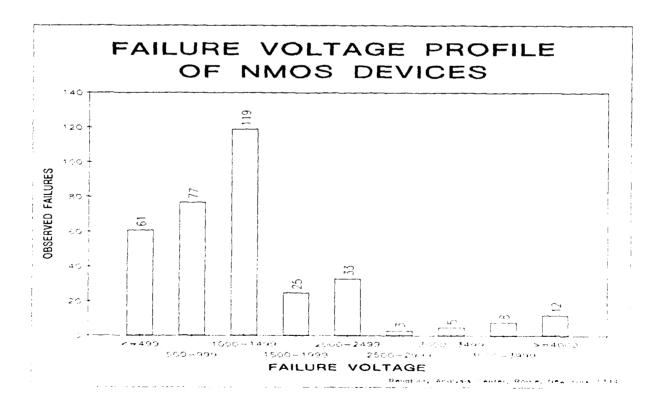


FIGURE 13

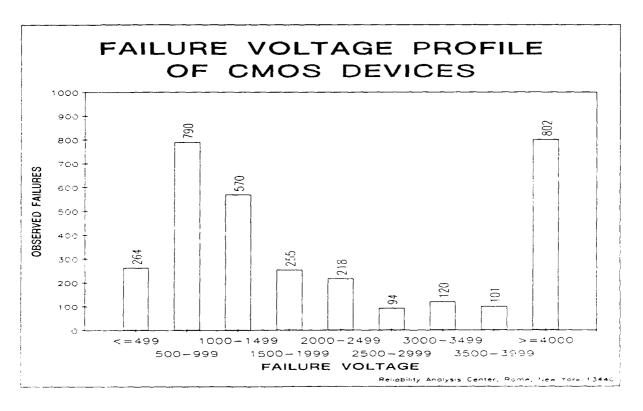


FIGURE 14

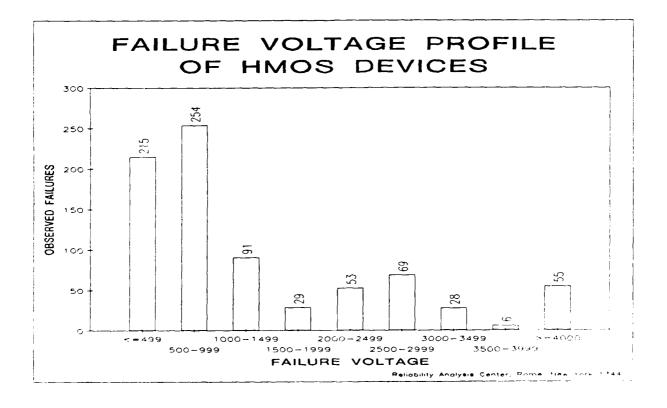


FIGURE 15

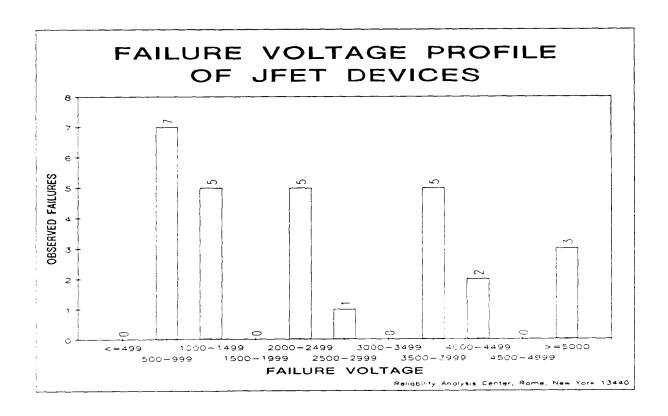


FIGURE 16

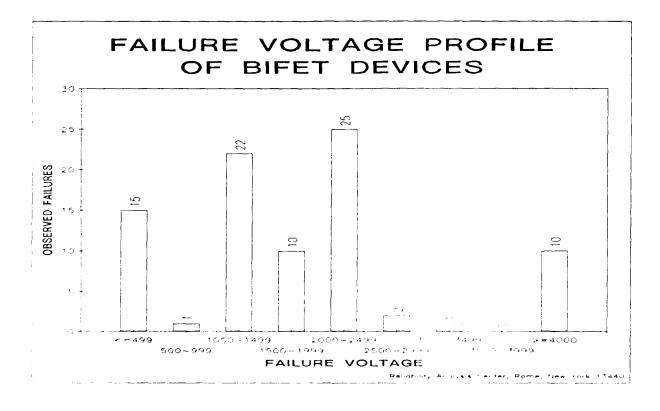


FIGURE 17

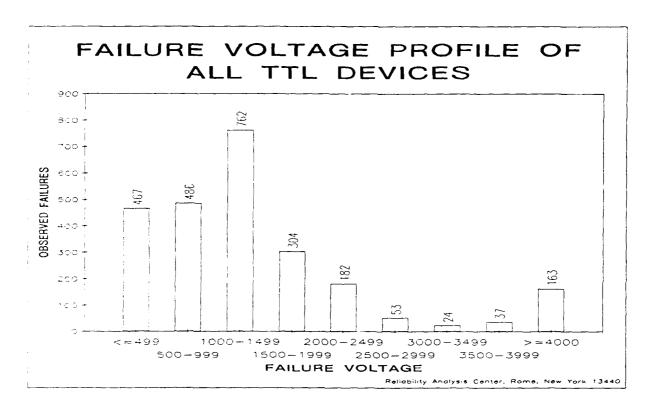


FIGURE 18

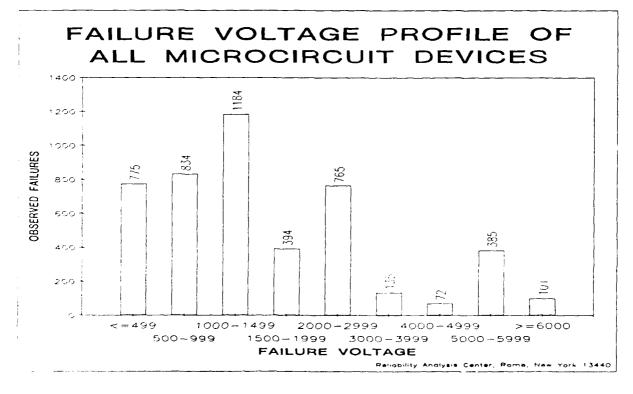


FIGURE 19

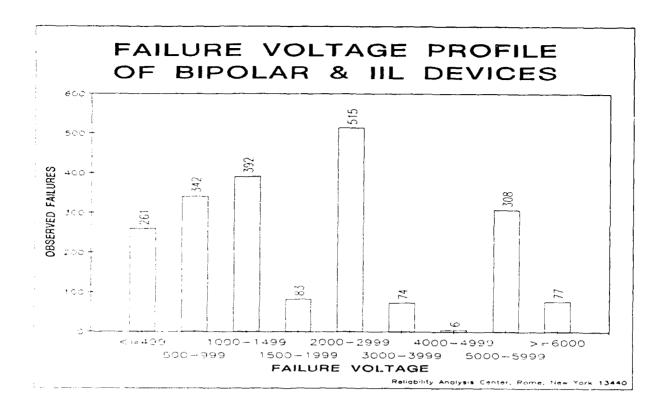


FIGURE 20

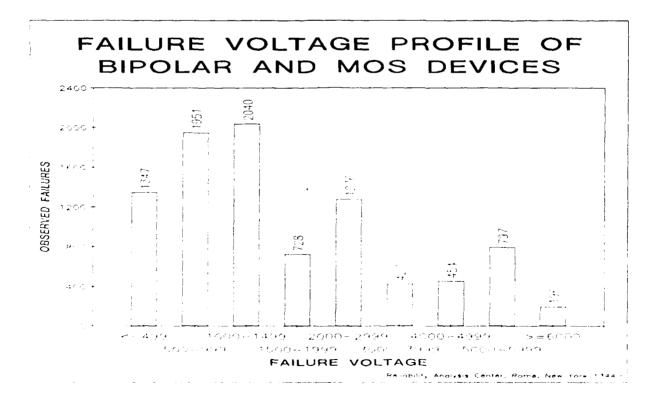
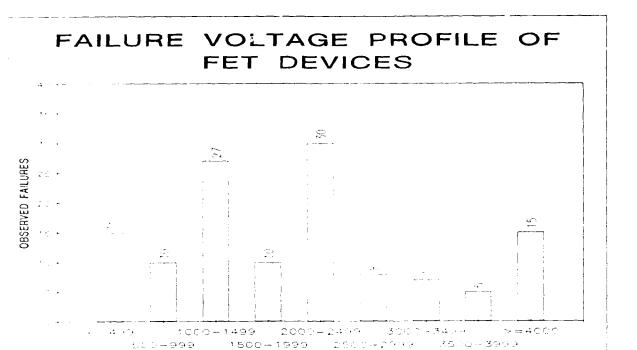


FIGURE 21



FAILURE VOLTAGE

FIGURE 22

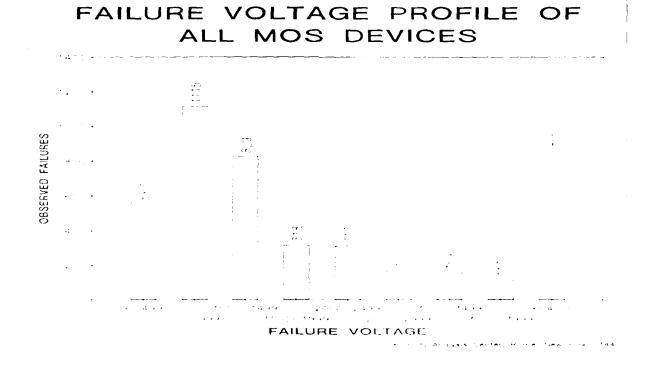


FIGURE 23



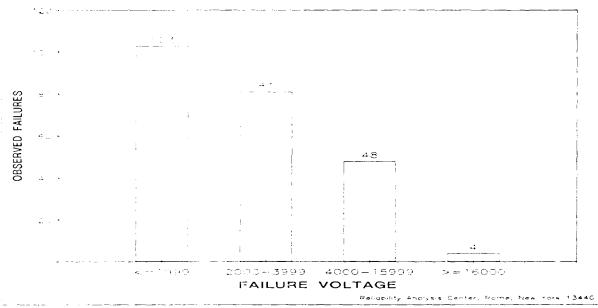


FIGURE 24

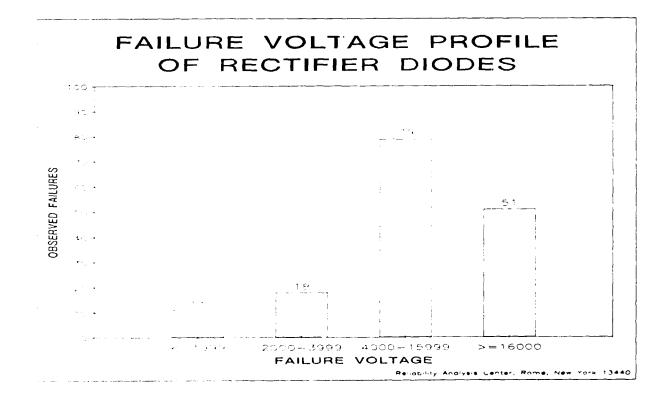


FIGURE 25



DESERVED FAILURES

FAILURE VOLTAGE

FIGURE 26

FAILURE VOLTAGE PROFILE OF MICROWAVE DIODES

OBSERVED FAILURE

0000-3999 4000-15999 FAILURE VOLTAGE

FIGURE 27

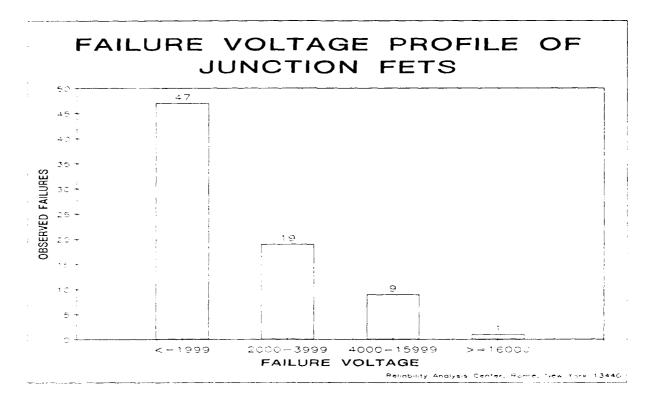


FIGURE 28

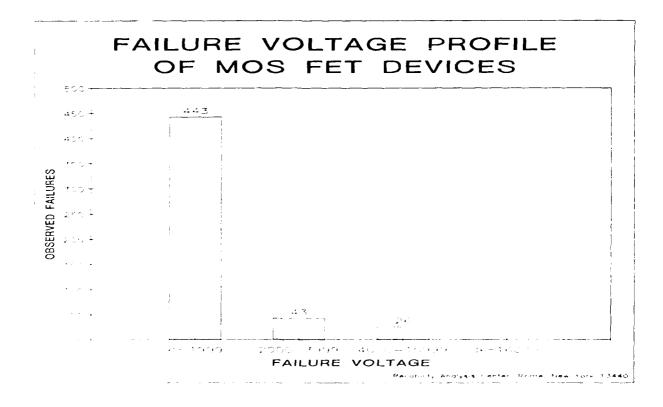


FIGURE 29

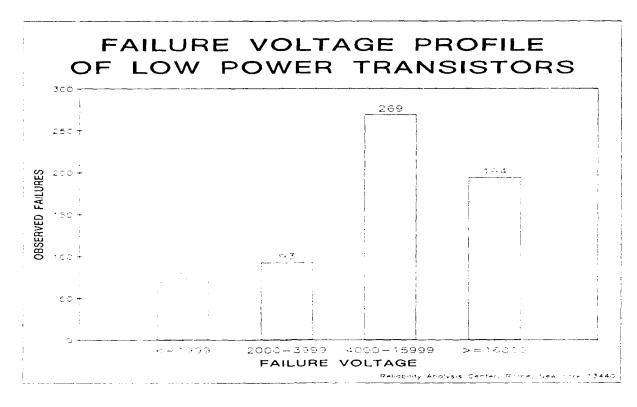


FIGURE 30

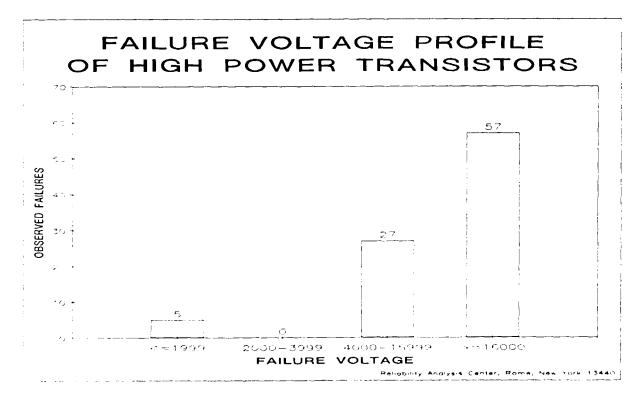


FIGURE 31

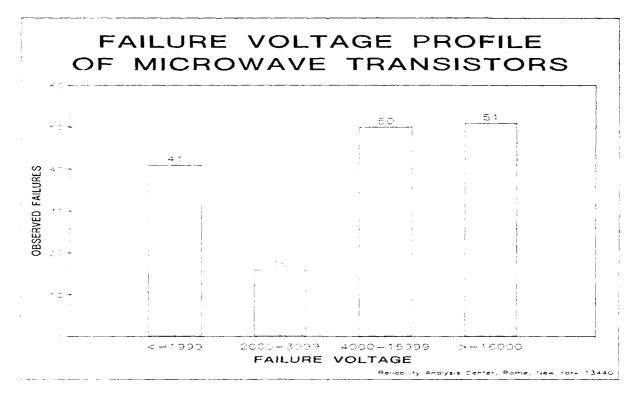


FIGURE 32

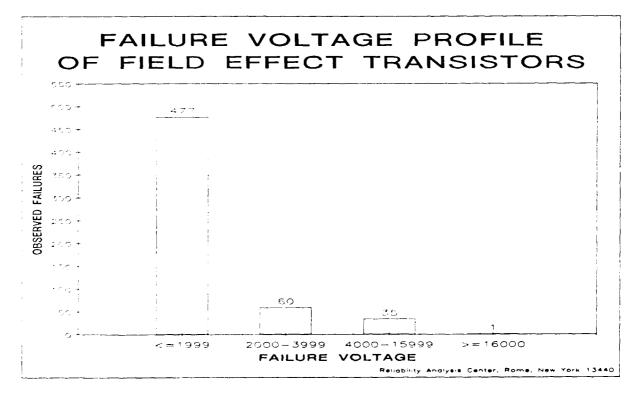


FIGURE 33

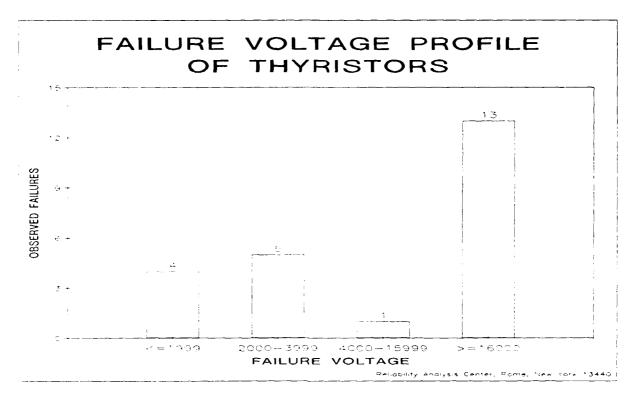


FIGURE 34

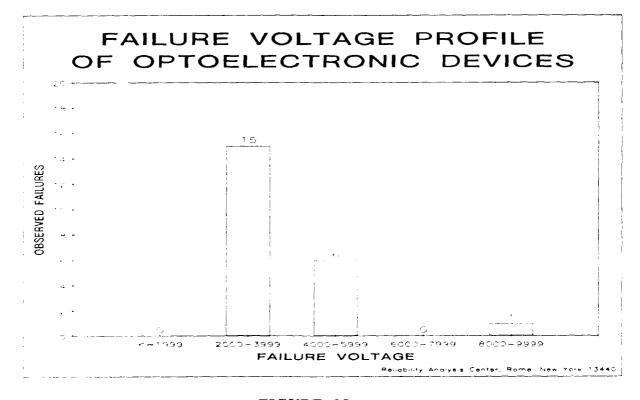


FIGURE 35

2.2 SUMMARIZED DATA - VOLTAGE VS. TECHNOLOGY

The data in this section was generated from the failure voltages of each entry in the Detailed Device Susceptibility Test Data of Section 3.0. Where necessary, the actual test voltages were converted to levels consistent with the widely recognized 100 pF, 1500 ohm human body model since mixing failure voltages of data obtained with different resistor-capacitor values and different discharge models would confound the data significantly. This data conversion methodology was discussed in Section 1.4.

It should be noted that data was also included which represents an approximate upper bound of threshold voltages (i.e., one test at one voltage was carried out on a device and a failure resulted). Thus, although exact damage threshold voltage of the device could not be determined from that one data point, it is known that the threshold is equal to or less than the test voltage.

The data as presented in this section may be somewhat biased since all data entries from the detailed data section were used. This bias comes from the fact that where one data source may have included all of the data (on all pins, for example) another may have only presented the worst-case failures (i.e., the most sensitive pin).

2.3 PERCENTAGE OF FAILURES PER TECHNOLOGY

A total of 5,501 device records were categorized during the preparation of this databook. Table 1 and 2 summarizes the percentages of each technology family, (integrated circuits and discrete semiconductors respectively) in each category of ESD classification. Section 3.0 contains the complete categorization data by part numbers.

TABLE 1: PERCENTAGE OF FAILURE RECORDS PER TECHNOLOGY-IC

3	(>=4000)	4.3% (14)	0.2% (1)	67.7% (94)	1.8% (1)	0.4% (3)	7.0% (50)	4.1% (3)	3.5% (12)	24.5% (792)	6.9% (55)	18.5% (5)	11.6% (10)	6.6% (163)	12.3% (556)	19.1% (393)	15.8% (1418)	13.3% (15)	19.4% (862)
	(3500-3999)	0.3% (1)	0.0% (0)	11.5% (16)	0.0% (0)	1.5% (11)	1.2% (9)	2.7% (2)	2.3% (8)	3.1% (101)	0.8% (6)	18.5% (5)	0.0% (0)	1.5% (37)	1.1% (50)	0.6% (13)	1.9% (167)	4.4% (5)	2.7% (117)
	(3000-3499)	1.5% (5)	0.2% (1)	1.4% (2)	1.8% (1)	0.7% (5)	1.4% (10)	8.2% (6)	1.5% (5)	3.7% (120)	3.5% (28)	0.0% (0)	1.2% (1)	1.0% (24)	1.9% (85)	3.0% (61)	2.7% (244)	(1) %6:0	3.6% (159)
2	(2500-2999)	8.3% (27)	0.0% (0)	6.5% (9)	0.0% (0)	1.6% (12)	0.7% (5)	5.5% (4)	0.9% (3)	2.9% (94)	8.6% (69)	3.7% (1)	2.3% (2)	2.1% (53)	2.9% (132)	3.8% (79)	3.4% (302)	2.6% (3)	3.8% (170)
	(2000-2499) (2500-2999)	22.9% (75)	8.1% (40)	0.7% (1)	3.6% (2)	1.5% (11)	7.3% (53)	(1) %9.6	9.6% (33)	6.7% (218)	6.6% (53)	18.5% (5)	29.1% (25)	7.3% (182)	13.6% (618)	21.2% (436)	10.3% (929)	26.5% (30)	7.0% (311)
	(1500-1999)	22.3% (73)	2.7% (13)	0.0% (0)	0.0% (0)	23.2% (172)	6.3% (46)	12.3% (9)	7.3% (25)	7.9% (240)	3.6% (29)	0.0% (0)	11.6% (10)	12.3% (304)	8.5% (387)	4.0% (83)	7.8% (705)	8.9% (10)	7.1% (318)
	(1000-1499)	8.6% (28)	49.6% (244)	1.4% (2)	0.0% (0)	25.3% (187)	41.6% (301)	23.3% (17)	34.7% (119)	18.6% (601)	11.4% (91)	14.8% (4)	25.6% (22)	30.8% (762)	25.4% (1154)	19.1% (392)	22.0% (1982)	23.0% (26)	18.6% (828)
1	(666-005)	6.1% (20)	19.1% (94)	0.0% (0)	0.0% (0)	25.8% (191)	25.0% (181)	(') %9.6	22.4% (77)	24.4% (790)	31.7% (254)	26.0% (7)	1.2% (1)	19.6% (486)	18.3% (828)	16.6% (342)	21.8% (1956)	7.1% (8)	25.3% (1128)
	(66+=>)	25.7% (84)	20.1% (99)	10.8% (15)	92.8% (52)	20.0% (148)	6.5% (69)	24.7% (18)	17.8% (61)	8.2% (264)	26.9% (215)	0.0% (0)	17.4% (15)	18.8% (467)	16.0% (726)	12.6% (259)	14.3% (1284)	13.3% (15)	12.5% (558)
	TECHNOLOGY	m	STTL	гшг	нтт	LSTTL	Advanced STTL and LSTTL	MOS	NMOS	CMOS	NMOS	JFET	BIFET	All TTL's	Bipolar Microcircuits	Bipolar and IIL	Bipolar and MOS	All FET's	All MOS's

TABLE 2: PERCENTAGE OF FAILURE RECORDS PER CIRCUIT TYPE-DISCRETE

2	4000-15999 >= 16000	20.3% (48) 1.7% (4)	49.7% (79) 32.1% (51)	18.9% (65) 80.5% (277)	31.8% (40) 2.4% (3)	11.8% (9) 1.3% (1)	5.1% (26) 0.0% (0)	42.0% (259) 31.5% (194)	30.3% (27) 64.1% (57)	31.7% (50) 32.3% (51)	5.9% (35) 0.2% (1)	4.4% (1) 56.5% (13)	31.8% (7)
2	2000-3999	34.3% (81)	11.3% (18)	0.3% (1)	7.9% (10)	25.1% (19)	8.4% (43)	15.1% (93)	0.0% (0)	10.1% (16)	10.4% (62)	21.7% (5)	68 2% (15)
	<= 1999	43.7% (103)	6.9% (11)	0.3% (1)	57.9% (73)	61.8% (47)	86.5% (443)	11.4% (70)	5.6% (5)	25.9% (41)	83.5% (497)	17.4% (4)	(0) %00
	CIRCUIT TYPE	Small Signal Diode	Rectifier	Zener	Microwave Diode	Junction FET	MOS FET	Low Power Transistor	High Power Transistor	Microwave Transistor	Field Effect Transistor	Thyristor	Ontoelectronic Device

SECTION 3.0

DETAILED DEVICE SUSCEPTIBILITY TEST DATA

	(19) General Remarks
	(18) Teat Remarks
ology	(17) Failure Criteria
(5) Technology	(16) Pia Combination
	(15) Test Voltage
	(14) Test Result
	(13) Number Devices
	(12) Date Code
	(11) Number Pulses
	(10) Test Capaciance
(4) Pan Description	(9) Test Resistance
(r)	St Feet Tyre
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12年7月

- (1) BASIC PART NUMBER. The part number of the device.
- (2) MANUFACTURER. Manufacturer of the device (see Table 3).
- ESD CLASSICATION. The classification per MIL-STD-1686A and MIL-STD-883 based on the best available data. \mathfrak{S}
- (4) <u>DESCRIPTION</u>. Basic function of the device.
- (5) TECHNOLOGY. The basic technology of the device.
- (6) TEST SOURCE. Source code identifies the data source (see Section 5.0).
- (7) TEST DATE. Date (month and year) the test was performed.
- TEST TYPE. SS = Step Stress, i.e., the device was stressed in incremental voltages and tested for failure between each one. GN = Go/No-Go, i.e., one voltage level only applied to the device and then tested for failure. <u>®</u>
- (9) RFS. Resistance (in ohms) used in the discharge circuit.
- $\overline{\text{CAP}}$. Capacitance used in the discharge circuit (10⁻⁶ = microfarads, 10^{-12} = picofarads). (10)
- NUMBER PULSES. The total number of pulses applied to the device at the voltage (field no. 15) before failure (if result = fail) or before testing for failure (if result = pass). (11)
- (12) <u>DATE CODE</u>. Date code as it appeared on the device.
- NUM. DEV. The number of devices which were tested to the same stresses results (i.e., all other fields the same). (13)
- RESULT. Whether the device passed or failed testing at the given test conditions. (14)

	(19) General Remarks
	(18) Test Remarks
ology	(17) Failure Criteria
(5) Technology	(16) Pin Combination
	(15) Test Voltage
	(14) Test Result
	(13) Number Devices
	(12) Date Code
	(11) Number Puisos
	(10) Test Capacitance
(4) Purt Description	(9) Test Resistance
€	(8) Test Type
(3) ESD Class	(7) Test Date
(3) Para Mfr.	(6) Test Source
(1) Part Number	

VOLTACE. The voltage applied to the device (if the device was step-stressed and it failed during stepping, the tables softage a given).

PIN COMBINATION. The pin combination tested: function, pin number, and polarity (if known).

(17) <u>FAILURE CRITERIA</u>. Criteria used to detect device failure (see Table 4).

TEST REMARK. Any comment which clarifies the data with respect to the specific test record (see Table 5). (18)

GENERAL REMARK. Any comment which clarifies the test procedures or results (see Table 6). 6<u>1)</u> 42

Table 3 - MANUFACTURER LISTING

CODE	MANUFACTURER NAME	CODE	MANUFACTURER NAME
ALP	Alpha Industries	мот	Motorola Semi
AM	American Microcircuits	MPI	Micropac Industries
AMD	Advanced Micro Devices	MSC	Microwave Semi Corp
AMP	Amperex Electronics	MSI	Microsystems International
ANA	Analog Devices	N/R	Not Reported
ANZ	Anzac Electronics	NCR	National Cash Register
ATM	ATMEL	NEC	Nippon Electric Company (NEC)
BEC	Beckman Instruments	NIT	Nitron
BEN	Bendix	NSC	National Semi
CCL	Croven Crystal Ltd.	NUC	Nucleonic Prod
CEN	Centralab	PLE	Plessey
CMB	Component Device Inc.	PPC	PPC Products
000	Codi Semiconductor	PPI	Precision Products Inc.
cs:	Continental Semi. Inc.	PRE	Precision Monolithics
CYP	Cypress Semiconductor	RAY	Raytheon
DAL	Dale Electronics	RCA	RCA
000	Dynamic Control Corp	RI	Rockwell Intl (Includes Collins)
CEL	Delco Electronics	SCN	Semicon
010	Dickson Elec. Corp.	SEM	Semtech Corp.
ETC	Elec. Transistor Corp.	SEN	Sensitron Semi.
FSC	Fairchild	SEQ	SEEQ
GΕ	General Electric	SGS	SGS ATES
GEŅ	General Semiconductor	SIE	Siemans
G:	General Instruments	SIG	Signetics
GTL	Gilway Technical Lamp	SIL	Silicon General
HAR	Harris	SIX	Siliconix
наы	Haufman	SOL	Solitron Devices
нЕМ	Hewlett Packard	SPR	Sprague Electric
нП	Hitachi	SSD	Solid State Devices
NOH	Honeywell	SSS	Solid State Scientific
нүв	Hybrid Systems	SUP	Supertex
HYC	Hycomp Inc.	SYN	Syntron
101	International Device Technologies	TEC	Teledyne Crystalonics
1:1	ITT Semiconductor	TEK	Tektronix
INM	INMOS	TEL	Teledyne
INS	Insetek	TEX	Texas Instruments
INT	Intel	THC	Thermometrics
: PC	Intl. Rectifier Corp.	TRC	Transition Elec. Corp.
ISL	Intersit	TRW	TRW
1 TE	Intech	TOU	United Detector Technology
KSC	KSC Semiconductor Corp.	ULT	Ultronix Inc.
LEA	Lear Siegler	UNI	Unitrode
LTC	Linear Technology Corp.	VAR	Various
MAC	MACOM	VIS	Vishay
MAS	Microwave Associates		Westinghouse
MCC			Xicor
MIT	•	211	Zilog
MON	•		-

MOS Mostek

Table 4 - FAILURE CRITERIA LISTING

CODE FAILURE CRITERIA

- 1 1 UA LEAKAGE AT 10V.
- 2 1 UA LEAKAGE AT 20V.
- 3 10 UA INPUT LEAKAGE PREVIOUSLY MEASURED TO BE 1 UA.
- 4 10% CHANGE IN ELECTRICAL PARAMETERS.
- 5 10% CHANGE IN LEAKAGE CURRENT.
- 6 10% PARAMETER CHANGE.
- 7 110= 4 UA.
- 8 2 MA LEAKAGE CURRENT OR OPEN CONDUCTOR LINES.
- 9 2 UA LEAKAGE CURRENT OR OPEN CONDUCTOR LINES.
- 10 2% CHANGE OF VOUT AT IL= 50UA.
- 11 20 UA LEAKAGE CURRENT OR OPEN CONDUCTOR LINES.
- 12 200 NA LEAKAGE CURRENT OR OPEN CONDUCTOR LINES.
- 13 25% LEAKAGE, 1uA LEAKAGE, FUNCTION FAILS.
- 14 50% DROP IN REVERSE VOLTAGE AT IR= 5UA.
- 15 SO% DROP IN V(BR) CBO AT IB= 5UA.
- 16 50% DROP IN V(BR) GSS AT IG= 5UA.
- 17 50% INCREASE IN GATE LEAKAGE CURRENT.
- 18 A 10% CHANGE IN INPUT OFFSET VOLTAGE AND INPUT BIAS CURRENT.
- 19 A 10% OR > CHANGE IN ANY MEASURED ELECTRICAL PARAMETER WAS CONSIDERED A FAILURE.
- 20 A 10% OR > INC. IN MEAS. LEAKAGE CURRENT @OR < A VOLT 10% < THE INITIAL BRKDWN VOLT.
- 21 A CHANGE OF 0.5% OR GREATER TOLERANCE.
- 22 A SHIFT OF 10% OF INPUT OFFSET VOLTAGE AND INPUT BIAS CURRENT.
- 23 ANY MEASURABLE CHANGE IN AN ELECTRICAL PARAMETER.
- 24 BVBE AT IR= 100NA.
- 25 CATASTROPHIC FAILURE (INPUT CURRENT).
- 26 CATASTPOPHIC.
- 27 CHANGE IN IGSS.
- 28 CHANGE IN IIH OF 10%.
- 29 CHANGE IN 11H OF 20NA AT VCC= 5.5V AND VIN= 2.4V.
- 30 CHANGE IN 11H OF 500% AT VIN= 2.7V.
- 31 CHANGE IN IIL OF +500% AT VIN= .45V.
- 32 CHANGE IN IIL OF 500% AT VIN= 5V.
- 33 CHANGE IN 110 OF 500%.
- 34 CHANGE IN IL OF +500% AT VIN= 1V.
- 35 CHANGE IN IR OF +500% AT VBR= 30V.
- 36 CHANGE IN IR OF +500% AT VR= 50V.
- 37 CHANGE IN IR OF 500% AT VBR= 10V.
- 38 CHANGE IN IR OF 500% AT VR = 35V.
- 39 CHANGE IN 1S OF 500% AT VS= -10V. 40 CHANGE IN RESISTANCE OF .1%.
- 41 CHANGE IN RESISTANCE OF 2%.
- 42 CHANGE IN VOL OF .050V AT VCC= 4.5V, IOL= 2MA AND VIN= 2 OV.
- 43 CHANGE OF 0.5% OR GREATER TOLERANCE.
- 44 CHANGED IN IV CHARACTERISTICS WITH INPUTS HIGH.
- 45 CHECK FOR ANY CHANGE IN FORWARD VOLTAGE AND REVERSE LEAKAGE CURRENT.
- 46 CUMULATIVE LEAKAGE CURRENT.
- 47 D.C. PAPAMETER OUT OF SPEC.
- 48 DAMAGE TO INPUT DIODE.
- 49 DEGRADATION OF V-I CURVE OR FUNCTIONAL FAILURE.
- 50 DEVICE CONSIDERED ESD SENSITIVE WHEN A 10%CHANGE IN ELECT. CHAR. WAS OBSERVED.
- 51 ELECTRICAL PARAMETERS OUT OF SPEC.
- 52 EXCESSI'E LEAKAGE CURRENT OR OPEN CONDUCTOR LINES.
- 53 FAILED THE DC ELECTRICAL PARAMETERS TEST LIMITS.

Table 4 - FAILURE CRITERIA LISTING (Cont'd)

CODE FAILURE CRITERIA 54 FAILED VOLTAGE IS THE AVERAGE OF PARTS SAMPLED. 55 FAILS TO MEET ELECTRICAL SPECIFICATION. 56 FUNCTION FAILURE OR D.C. PARAMETER OUT OF SPEC. 57 FUNCTIONAL FAILURE. 58 GATE CURRENT GREATER THAN 5UA AT A GATE/SOURCE VOLTAGE OF 22 VOLTS. 59 GREATER THAN .5UA INPUT AT 10V. 60 GREATER THAN 1UA LEAKAGE CURRENT AT 1.5 VOLTS. 61 GREATER THAN SUA LEAKAGE CURRENT AT 0.5 VOLTS. 62 ID= SHORT. 63 IDSS OUT OF SPEC. 64 IEB AT VEB= +6V +1000% CHANGE. 65 IEBO AT VEB= -6V +1000% CHANGE. 66 IEBO AT VEB= 2.5V +1000% CHANGE. 67 IEBO AT VEB= 3.5V 1000% CHANGE. 68 IF AC.DC.OR FUNCTIONAL PARAMETERS FAILS THE MIN. OR MAX. LIMITS. 69 IGSS AND V(BR)GSS OUT OF SPEC. 70 IGSS AT VGS= -20V +1000% CHANGE. 71 IGSS OUT OF SPEC. 72 IGSSR >25PA AT VGS= 8V AND VDS= 0V. 73 IGSSR AND IDSS OUT OF SPEC. 74 IGSSR AND VGS(TH) OUT OF SPEC. 75 IGSSR OUT OF SPEC. 76 IGSSR, VGS(TH) OR IDSS OUT OF SPEC. 77 IIH AND VR OUT OF SPEC. 78 IIH AND/OR VOL OUT OF SPEC. 79 IIH AND/OR VR OUT OF SPEC. 80 IIH OUT OF SPEC. 81 IIH, IIL, OR ISS OUT OF SPEC AT VDD=15V. 82 IIH, IIL, ISS OUT OF SPEC. 83 IIH, IIL, OR ISS OUT OF SPEC. 84 IIH, VF, OR VR OUT OF SPEC. 85 IIH= 10MA. 86 IIH= 16MA. 87 IIH= 97UA. 88 IIL OUT OF SPEC. 89 IL AT VR= .5V +300%. 90 IL AT VR= 50V +1000% CHANGE. 91 INPUT BREAKDOWN OF 5MV. 92 INPUT SHORTED TO VCC. 93 INPUTS SHORTED TO GROUND. 94 IR AND VB OUT OF SPEC. 95 IR GREATER THAN 100% CHANGE. 96 IR OUT OF SPEC. 97 IR= 300UA AT 50 VOLTS. 98 IZ AT VR= 5V +1000% CHANGE. 99 IZ AT VR= 6.5V +1000% CHANGE. 100 LEAKAGE CURRENT. 101 LIGHT OUTPUT DEGRADATION AT CONSTANT CURRENT. 102 N/R. 103 PARAMETER CHANGE OF GREATER THAN 10%.

104 PARAMETER SHIFT OF GREATER THAN 10%.

106 RESISTANCE CHANGE OF 1%.

105 PASSED FUNCTIONALLY OR DC ELECTRICAL PARAMETERS.

Table 4 - FAILURE CRITERIA LISTING (Cont'd)

CODE FAILURE CRITERIA

- 107 RESISTANCE OUT OF SPEC.
- 108 SIGNIFICANT AMOUNT OF DEGRADATION TO V-I CURVE.
- 109 SIGNIFICANT CHANGE IN THE +INPUT -GROUND V-I CURVE.
- 110 STUDY OF BREAKDOWN CHARACTERISTIC OF INPUT AND OUTPUT PINS.
- 111 TEST LEAKAGE CURRENT.
- 112 TESTED TO 2000 VOLTS PER METHOD 3015.2 OF MIL-STD-883.
- 113 V(BR)GSS OUT OF SPEC.
- 114 VB OUT OF SPEC.
- 115 VEBO= IV. TYPICALLY 5 VOLTS.
- 116 VGS(OFF) OUT OF SPEC AND IGSSR >25PA AT VGS= 8V AND VDS= 0V.
- 117 VGS(OFF) OUT OF SPEC AND/OR IGSSR >25PA AT VGS=8V AND VDS=0V.
- 118 VGS(OFF) OUT OF SPEC AT VDS= 15V AND ID= 50UA.
- 119 VGS(TH) AND IDSS OUT OF SPEC.
- 120 VGS(TH) OUT OF SPEC.
- 121 VR OUT OF SPEC.
- 122 WHEN ONE PULSE RESULTED IN DECREASE REV. LEAKAGE OR DECREASE IN JUNC. BRKDWN. VOLT.
- 123 WHEN ONE PULSE RESULTED IN INCREASE REV. LEAKAGE OR DECREASE IN JUNC. BRKDWN. VOLT.

Table 5 - TEST REMARKS LISTING

CODE TEST REMARKS 1 1-DEV. IR SHORT, 3-100% CHANGE, 1-25% CHANGE, 5- NO CHANGE, 5 PULSES FWD & REV. 2 1.13M OHM MODEL. 3 1.1M OHM MODEL. 4 1.21M OHM MODEL. 5 1.58M OHM MODEL. 6 1.69M OHM MODEL. 7 1.78M OHM MODEL. 8 10 MHZ CRYSTAL OSCILLATOR. 9 10 OHM MODEL. 10 10000 VOLTS IS AN AVERAGE OF AN UNKNOWN NUMBER OF DEVICES. 11 107 OHM MODEL. 12 11.8 OHM MODEL. 13 12 MHZ CRYSTAL OSCILLATOR. 14 133K CHM MODEL. 15 1400 VOLTS IS AN AVERAGE OF 3 DEVICES. 16 140K OHM MODEL. 17 15 MHZ CRYSTAL OSCILLATOR. 18 150K OHM MODEL. 19 16 MHZ CRYSTAL OSCILLATOR. 20 1625 VOLTS IS AN AVERAGE OF AN UNKNOWN NUMBER OF DEVICES. 21 16300 VOLTS IS AN AVERAGE OF AN UNKNOWN NUMBER OF DEVICES. 22 1900 VOLTS IS AN AVERAGE OF AN UNKNOWN NUMBER OF DEVICES. 23 1M OHM MODEL. 24 2 DEVICES INCREASED IR FROM .09, .095 TO .85, .65uA. 5 PULSES FWD & REVERSE. 25 2 OUT OF 9 DEVICES TESTED FAILED. 26 2.1M OHM MODEL. 27 2.49M OHM MODEL. 28 2.6% OF TOTAL NUMBER OF PINS FAILED. 29 2.94M OHM MODEL. 30 20.5 OHM MODEL. 31 220 OHM MODEL. 32 232K OHM MODEL. 33 24.9 OHM MODEL. 34 240K OHM MODEL. 35 250 OHM MODEL. 36 250K OHM MODEL. 37 27.2% OF TOTAL NUMBER OF PINS FAILED. 38 270K OHM MODEL. 39 294K OHM MODEL. 40 297K OHM MODEL. 41 3.01M OHM MODEL. 42 301 OHM MODEL. 43 3200 VOLTS IS AN AVERAGE OF AN UNKNOWN NUMBER OF DEVICES. 44 330 OHM MODEL. 45 360.1K OHM MODEL. 46 38/PIN DEVICE CMOS, GATE ARRAY, SEMICUSTOM, MONOLITHIC. 47 383 OHM MODEL. 48 392K OHM MODEL. 49 4.37 OHM MODEL. 50 4.7% OF TOTAL NUMBER OF PINS FAILED.

51 400K OHM MODEL.

53 47.5 OHM MODEL.

52 450 VOLTS IS AN AVERAGE OF AN UNKNOWN NUMBER OF DEVICES.

Table 5 - TEST REMARKS LISTING (Cont'd)

CODE TEST REMARKS

- 54 475 VOLTS IS AN AVERAGE OF AN UNKNOWN NUMBER OF DEVICES.
- 55 475K OHM MODEL.
- 56 49.9 OHM MODEL.
- 57 499 OHM MODEL.
- 58 5 PULSES APPLIED AT BOTH FORWARD AND REVERSE POLARITIES.
- 59 5 PULSES FORWARD. 5 PULSES REVERSE.
- 60 5 PULSES PER POLARITY. DEVICES HAD METAL LID.
- 61 50 OHM MODEL.
- 62 50% FAILURE RATE WITH ARCING BETWEEN LEADS.
- 63 5000 VOLTS IS AN AVERAGE OF AN UNKNOWN NUMBER OF DEVICES.
- 64 511K OHM RESISTOR.
- 65 5500 VOLTS IS AN AVERAGE OF AN UNKNOWN NUMBER OF DEVICES.
- 66 57.6 OHM MODEL.
- 67 590 OHM MODEL.
- 68 600 VOLTS IS AN AVERAGE OF AN UNKNOWN NUMBER OF DEVICES.
- 69 604K OHM MODEL.
- 70 665K OHM MODEL.
- 71 7 OUT OF 10 DEVICES FAILED COLLECTOR TO BASE.
- 72 768K OHM MODEL.
- 73 7800 VOLTS IS AN AVERAGE OF AN UNKNOWN NUMBER OF DEVICES.
- 74 850 VOLTS IS AN AVERAGE OF AN UNKNOWN NUMBER OF DEVICES.
- 75 ALL 10 INPUTS FAILED TO VSS AT 800 VOLTS.
- 76 ALL UNUSED INPUTS AT 5.5 VOLTS.
- 77 ALL UNUSED INPUTS AT GROUND.
- 78 ALSO DEGRADATION FROM COMMON TO OUTPUT OF 4000 VOLTS.
- 79 ALSO FAILED 4,5,7-13 TO VDD AT 500 VOLTS.
- 80 ALSO FAILED FROM 5.6 & 7 TO VSS AT 800 VOLTS.
- 81 ALSO FAILED FROM ALL OTHER INPUTS TO VSS AT 800 VOLTS.
- 82 ALSO FAILED FROM INPUT PINS 5.6.8-13 TO VSS AT 800 VOLTS.
- 83 ALSO FAILED FROM PIN 7 TO OUTPUT AT 1000 VOLTS.
- 84 ALSO FAILED FROM PINS 4-8 AND 11-13 TO VSS AT 800 VOLTS.
- 85 ALSO FAILED FROM PINS 5,6,7,11 TO VDD AT 1000 VOLTS.
- 86 ALSO FAILED FROM PINS 5-13 TO VSS AT 800 VOLTS.
- 87 ALSO FAILED FROM PINS 8-13 TO VSS AT 800 VOLTS.
- 88 ALSO FAILED PIN 12 TO VDD AT 500 VOLTS.
- 89 ALSO FAILED PIN 4 TO VDD, 5-7,9-13 TO OUTPUT AT 500 VOLTS
- 90 ALSO FAILED PIN 9 TO OUTPUT AT 800 VOLTS.
- 91 ALSO FAILED PIN 9 TO VDD AND 8 TO OUTPUT AT 1000 VOLTS.
- 92 ALSO FAILED PIN 9 TO VSS AT 800 VOLTS.
- 93 ALSO FAILED PINS 4,5 & 9 TO VSS AT 800 VOLTS.
- 94 ALSO FAILED PINS 5 AND 10 TO VDD AT 800 VOLTS.
- 95 ALSO FAILED PINS 5-13 TO OUTPUT AT 500 VOLTS
- 96 ALSO FAILED PINS 5-13 TO VSS AT 800 VOLTS
- 97 ALSO INPUT TO GND DEGRADED AT 1800 VOLTS.
- 98 ALSO SHOWED DEGRADATION ON INPUT TO INPUT AT 2000 VOLTS.
- 99 AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 1000V.
- 100 AVERAGE FA! URE VOLTAGE FOR ALL PINS IS 1020V.
- 101 AVERAGE FAILURE YOUTAGE FOR ALL PINS IS 1025V.
- 102 AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 1060V.
- 103 AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 1070V.
- 104 AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 1080V.
 105 AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 1100V.
- 106 AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 1125V.

Table 5 - TEST REMARKS LISTING (Cont'd)

CODE	TEST REMARKS
107	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 1170V.
108	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 1200V.
	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 1310V.
110	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 1325V.
111	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 1350V.
112	
113	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 1600V.
114	
115	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 1700V.
116	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 1750V.
117	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 2300V.
118	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 2400V.
119	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 2450V.
120	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 2500V.
121	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 2600V.
122	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 2700V.
123	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 2900V.
124	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 3000V.
125	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 3200V.
126	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 3444V.
127	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 3500V.
128	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 3550V.
129	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 3700V.
130	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 3760V.
131	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 3800V.
132	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 3900V.
133	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 4550V.
134	
135	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 550V.
136	
	AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 700V. AVERAGE FAILURE VOLTAGE FOR ALL PINS IS 725V.
139	
140	
141	
142	· · · · · · · · · · · · · · · · · · ·
143	· · · · · · · · · · · · · · · · · · ·
144	AVG OF ALL INPUTS 960V, PINS 11,14 MOST SUSCEPTIBLE.
145	·
146	
147	
148	CATASTROPHIC FAILURES OBSERVED ARE DUE TO EMIT. CONTACT PENETRATING THE SILICON.
149	
150	COLLECTOR TO BASE FOUND TO BE MOST SENSITIVE (BOTH POLARITIES).
151	COMMON TO OUTPUT SHOWED DEGRADATION AT 4000 VOLTS.
152	CRYSTAL (4 Mnz).
153	DAMAGE OBSERVED AT -700 VOLTS, FAILED AT 1100 VOLTS.
154	
155	
156	DAMAGE OBSERVED AT 150 VOLTS, ALL DEVICES FAILED AT OR BEFORE 400 VOLTS.
157	DATE CODE TESTED WERE BETWEEN 8134 TO 8715.
158	
159	DEGRADATION OCCURRED AT 1500V.

Table 5 - TEST REMARKS LISTING (Cont'd)

CODE TEST REMARKS 160 DEGRADATION OCCURRED AT 2000V. 161 DEGRADATION OCCURRED AT 3000V. 162 DEGRADATION OCCURRED AT 3500V. 163 DEGRADATION OCCURRED AT 4500V. 164 DEGRADATION OCCURRED AT THE APPLIED VOLTAGE. 165 DELAY LINE, PULSE, ELECTROMAGNETIC, LUMPED CONSTANT, 16 PIN DIP. 166 DEVICE PASSED THE REVERSE V-I CURVE AFTER TESTING. 167 DIFFERENT PIN COMB. TESTED AT EACH VOLTAGE STEP. 168 DRIVER / RECEIVER. 169 DUAL PNP TRANSISTOR. 170 EACH PIN STRESSED WITH ALL OTHER PINS CONNECTED TO GROUND. 171 EACH PIN TESTED TO ALL OTHERS TIED TOGETHER. 172 EMITTER TO BASE FAILED AT 3500 VOLTS. 173 FAILED FROM PINS 4,8,13 TO VDD AND 10 TO OUTPUT AT 500 V. 174 FAILED INPUTS TO GND. VOLT IS AVG. OF 4 DEV. MEAN ENGY=16UJ. 175 FAILED PIN 13 TO VDD AT 500 V, 8 TO VSS, 6 TO VDD AT 800 V. 176 FAILED PIN 16 TO VDD AT 500 V & PIN 5 TO VSS AT 800 V. 177 FAILED PINS 13 TO VDD AND PIN 4 TO OUTPUT AT 800 VOLTS. 178 FAILED PINS 5-6,11-13 TO VSS 7 TO VDD & 8-10 TO OUTPUT 500V. 179 FAILED PINS 5-7,9,11 TO VSS 8,10,12 TO VDD AT 500 VOLTS. 180 FAILED PINS 5-8 & 10-13 TO VSS & PIN 9 TO VDD AT 500 VOLTS. 181 FAILED PINS 5-8 & 10-13 TO VSS AT 500V & 9 TO VSS AT 800 V. 182 FAILED PINS 8,13 TO VSS, 15 TO VSS AND 6 TO VDD, ALL AT 800V. 183 FAILED PINS 8-13 TO VSS AT 300V & PINS 4,6 TO OUTPUT AT 500V 184 FAILURE VOLTAGE FROM EMP DATA & WUNSCH MODEL. (SUPERSAP 2). 185 FAILURE VOLTAGE GIVEN IS APPROXIMATE VALUE ONLY. 186 FAILURE VOLTAGE IS AN AVERAGE OF 15 DEVICES. 187 FAILURE VOLTAGE IS AN AVERAGE. 188 FAILURE VOLTAGE OBTAINED FROM EMP DATA AND EXPONENTIAL MODEL. 189 FAILURE VOLTAGE AINED FROM EMP DATA AND WUNSCH MODEL. 190 FAILURE VOLTAGE OBTAINED FROM EMP DATA. 191 FAILURES WERE DUE TO INCREASED CONTACT RESISTANCE. 192 FIVE PULSES BOTH POLARITY ACROSS EACH PIN COMBINATION. 193 FREQUENCY SYNTHESIZER. 194 HEX SCHMIDTT TRIGGER. 195 HYBRID, OSCILLATOR. 196 IMCS TO >17.5KV, PAL TESTER TO >43KV. PAL IS A MOTOROLA IN HOUSE BUILT TESTER. 197 IN MOST FAILURES, Vos STARTS FAILING FIRST. THEN, IOS, IB, AND ICC. 198 INITIAL IGSS IS 0.1uA AND FINAL IGSS IS 10uA. 199 INITIAL IGSS IS 3.8UA AND FINAL IGSS IS 10UA.

- 200 INITIAL IGSS WAS 0.1uA AND FINAL IGSS WAS 1.0uA.
- 201 INITIAL IGSS WAS D. TUA AND THE FINAL TUSS WAS C. TUA.
- 202 INITIAL IGSS WAS 1.0UA AND FINAL IGSS WAS 3.4UA.
- 202 INTITAL 1035 WAS 1.00A AND FINAL 1035 WAS 3.40
- 203 INITIAL IGSS WAS 1UA AND FINAL IGSS WAS 10UA.
- 204 INPUT AND CLAMPING DIODES WERE TYPICAL FAILURES.
 205 INPUT FAILED AT 2500 AND 3000 VOLTS, OUTPUT DID NOT FAIL.
- 206 INPUT PIN 1 FAILED AT 200V AND INPUT PIN 8 FAILED AT 300V.
- 207 INPUT PIN 1 FAILED AT 200V AND INPUT PIN 8 FAILED AT 400V.
- 208 INPUT PIN 1 FAILED AT 200V.
- 209 INPUT PIN 1 FAILED AT 300V.
- 210 INPUT PIN 1 FAILED AT 400V AND INPUT PIN 8 FAILED AT 500V.
- 211 INPUT PIN 1 FAILED AT 500V.
- 212 INPUT PIN 10 FAILED AT 300V.

Table 5 - TEST REMARKS LISTING (Cont'd)

CODE TEST REMARKS 213 INPUT PIN 2 FAILED AT 200V. 214 INPUT PIN 2 FAILED AT 300V. 215 INPUT PIN 2 FAILED AT 400V. 216 INPUT PIN 2 FAILED AT 500V. 217 INPUT PIN 7 FAILED AT 200V. 218 INPUT PIN 8 FAILED AT 400V. 219 INPUT PIN 9 FAILED AT 400V. 220 INPUT PINS 1 AND 8 FAILED AT 300V. 221 INPUT PINS 1 AND 8 FAILED AT 400V. 222 INPUT PINS 1 AND 8 FAILED AT 500V. 223 INPUT PINS 1 AND 9 FAILED AT 200V. 224 INPUT PINS 11 AND 15 FAILED AT 200V. 225 INPUT PINS 2 AND 10 FAILED AT 200V. 226 INPUT PINS 2 AND 6 FAILED AT 200V. 227 INPUT PINS 2 AND 6 FAILED AT 300V. 228 INPUT PINS 7 AND 15 FAILED AT 300V. 229 INPUT TO COM. 3000 V, OUTPUT TO COMMON FAIL AT 1600 VOLTS. 230 INPUT TO OUTPUT DEGRADATED AT 600 VOLTS. 231 INPUTS STRESSED NO PINS GND CAP. OF PACKAGE TO GND IS 290PF. 232 INPUTS STRESSED NO PINS GND CAP. OF PACKAGE TO GND IS 3.5PF. 233 INPUTS STRESSED NO PINS GND CAP. OF PACKAGE TO GND IS 37PF. 234 INPUTS STRESSED NO PINS GND CAP. OF PACKAGE TO GND IS 3PF. 235 INPUTS STRESSED NO PINS GND CAP. OF PACKAGE TO GND IS 6.5PF. 236 INTEL METHOD. 237 INTEL MODEL. 238 IR CHANGED FROM .045uA TO 22.JuA ON ONE DEVICE. 5 PULSES FORWARD AND REVERSE. 239 IR CHANGED FROM .103uA, 200V TO .4uA, 80 VOLTS. 5 PULSES FORWARD & REVERSE. 240 IR DOUBLED AFTER 400 VOLTS, SHORTED AFTER 500 VOLTS. 241 IR INCREASED FROM .05uA TO 148uA. 5 PULSES FORWARD, 5 PULSES REVERSE. 242 IR INCREASED FROM .19MA TO .23MA. 5 PULSES FORWARD, 5 PULSES REVERSE. 243 IR INCREASED ON 3 DEVICES; 5.4 TO 6.2uA, 3.7 TO 4.1uA, AND 4.6 TO 5.6uA. 244 JUNCTION IS DAMAGED BEFORE DEVICE FAILS ELECTRICALLY. 245 LED DEVICES WHICH HAVE REV BRKDWN DAMAGE CAUSED BY ESD MAY FUNC NORM IN FWD DIR. 246 MICROCONTROLLER. 247 MIL-STD-883B METHOD 3015 (CAT B), DEVICE PASSED 2000V TEST. 248 MIMIMUM OBSERVED DAMAGE WAS 200 VOLTS ALL DEVICES FAILED AT OR BELOW 300 VOLTS. 249 MIMIMUM OBSERVED DAMAGE WAS 500 VOLTS ALL INPUT PINS FAILED AT OR BEFORE 700 V. 250 MINIMUM OBSERVED WAS 2600 VOLTS, ALL DEVICES FAILED AT OR BEFORE 3000 VOLTS. 251 MODULATOR. 252 N/R. 253 NO DEGRADATION TO OUTPUT AT 4000 VOLTS. 254 NO DEGRADATION TO OUTPUT PINS. 255 NO FAILURES OBSERVED GATE TO CATHODE. 256 OF 4 DEVICES FAILURE VOLTAGE WAS FROM 1400V TO 6000 VOLTS. 257 OF THE FOUR DEVICES TESTED TWO DEVICE DATE CODES WERE GIVEN AS 8615 AND 8501. 258 ONE DEVICE IR SHORTED. 5 PULSES FORWARD, 5 PULSES REVERSE. 259 OTHER PINS OPEN. 260 OTHER PINS TIED TO GND. 261 PAL TESTER IS A MOTOROLA IN HOUSE BUILT IMCS TO >17.5KV, PAL TO >43KV. 262 PIN UNDER TEST STRESSED WITH ALL OTHERS TIED TOGETHER FLOATING. 263 PINS 1 AND 2 FAILED AT 1100 VOLTS. 264 PINS 11-14 TO VSS,15 TO VDD AT 800V,8,13 TO OUTPUT AT 1000V.

265 PINS 13 TO VSS, 9 TO VSS AT 1000V, 8 TO VDD AT 1000 VOLTS.

Table 5 - TEST REMARKS LISTING (Cont'd)

TEST REMARKS 266 PINS 3,4,5, AND 22 FAILED AT 1200 VOLTS. 267 PINS 8-15 TO VSS AT 500V, 11 TO OUTPUT AT 500 VOLTS. 268 PINS THAT FAILED 3,6-8,11,14,15,17-21, AND 23. 269 PRECISION MOTION CONTROLLER. 270 PROGRAMMABLE BAND PASS FILTER. 271 PROGRAMMABLE INTERVAL TIMER. 272 QUAD DEVICE, ONE DIODE PER DEVICE TESTED. 273 SEMI-CUSTOM GATE ARRAY. 274 SERIAL INPUT PLL FREQUENCY SYNTHESIZER. 275 TEST PREPARED AT 25 DEGREES C. 276 THE MOST SENSITIVE PIN TESTED IS B. 277 THE MOST SENSITIVE PIN TESTED IS G. 278 THE MOST SENSITIVE PINS TESTED ARE C TO B. 279 THE MOST SENSITIVE PINS TESTED ARE C TO E. 280 THE MOST SENSITIVE PINS TESTED ARE E TO B. 281 THE MOST SENSITIVE PINS TESTED ARE G AND D TO S. 282 THE MOST SENSITIVE PINS TESTED ARE S AND D TO G. 283 THE MOST SENSITIVE PINS TESTED ARE S AND G TO D. 284 VOLTAGE IS AN AVERAGE OF 12 RESISTORS. MEAN ENERGY OF 48UJ. 285 VOLTAGE IS AN AVERAGE OF 4 DEVICES. 286 VOLTAGE IS AN AVERAGE OF ALL INPUTS. 287 WORST CASE PINS (+) 1-4,9,10,20,23-27(-)1,10.LOT # (413,410-1). 288 WORST CASE PINS (+) 4-6,22,23,25-27 (-) 20,21. LOT # (284/006,285/008,416-3). 289 ZERO OHMS MODEL.

Table 6 - GENERAL REMARKS LISTING

CODE GENERAL REMARKS

- 1 5 PULSES +/-.
- 2 ALL PINS BUT PIN UNDER TEST CONNECTED TO GND VIA RESISTOR. VDD AND VSS GROUNDED.
- 3 SEGIN WITH 200V, INCR. 100V TO 1000V, INCR. 200V TO 2000V, INCR 500V TO 4000V.
- 4 CHARGED DEVICE MODEL.
- 5 DATA OBTAINED FROM WEIBULL PLOTS. STEPS WERE 20% OF AN UNKNOWN STARTING VOLTAGE.
- 6 DEVICE PASSED REVERSE V-1 CURVE. FORWARD AND REVERSE POLARITY TESTED.
- 7 FAILED VOLTAGE IS THE AVERAGE OF PARTS SAMPLED.
- 8 FAILURE VOLTAGE OBTAINED FROM EMP DATA AND EXPONENTIAL MODEL.
- 9 FAILURE VOLTAGES GIVEN ARE VOLTAGE TO CAUSE 30% FAILURE. DETAILS UNKNOWN.
- 10 IMCS TESTER TO >17.5kV, PAL TESTER TO >43kV. ONE PULSE PER VOLTAGE INCREMENT.
- 11 IN ACCORDANCE WITH MIL-STD-883B METHOD 3015 (CAT B), DEVICE PASSED 2000V TESTING.
- 12 MODEL 900.
- 13 N/R
- 14 PIN COMBINATIONS AND POLARITY DIFFER FOR EACH OF THE FOUR PULSES.
- 15 FIN UNDER TEST STRESSED WITH ALL OTHER PINS TIED TOGETHER GROUNDED.
- 16 PIN UNDER TEST STRESSED WITH ALL OTHER PINS.
- 17 START 100V WITH INCREMENTS OF 100V TO 1000V. THEN INCREMENTS OF 250V TO FAILURE.
- 18 STEP STRESS TEST WAS PERFORMED HOWEVER ACTUAL VOLTAGE STEPS WERE UNKNOWN.
- 19 STEPPED FROM 1800 VOLTS TO FAILURE IN 25 VOLT INCREMENTS.
- 20 STEPPED IN 100 VOLT INCREMENTS STARTING AT 400 VOLTS.
- 21 STEPPED IN 2.5 VOLT INCREMENTS.
- 22 STEPPED IN 25 VOLT INCREMENTS.
- 23 STRESSED IN INCREMENTS OF 20% STARTING AT 16V FOR MOS DEVICES AND 70V FOR OTHERS.
- 24 TEST VOLTAGE WAS INCREMENTED FROM 100V TO 5500V IN 100V STEPS.
- 25 TESTED TO 2000 VOLTS PER METHOD 3015.2 OF MIL-STD-883.
- 26 TESTER IS A MARTIN MARIETTA IN HOUSE BUILT.
- 27 THERE WERE ALSO 100V INCREMENTS STEPPED FROM 100V TO 800V.
- 28 VOLT INCREMENTS AS FOLLOWS:100V TO 1KV,250V TO 3KV,500V TO 6KV,AND 1KV TO 16KV.
- 29 VOLTAGE STEP LEVELS 100 VOLT INCREMENTS UP TO 4000 VOLTS.

SECTION 3.1

MICROCIRCUIT SUSCEPTIBILITY TEST DATA

RAC_ESD_Database

Part Number		Part E	ESD	Part Description	ç				Technology	>	
0042	}		-	Linear, Op	Operational Amplifier	Lifier			Bipolar		
	Test	Test	Lost	Test Test	Test	Date		Test	Failure Test		General
	Source		Type	Resis	Capac i tance	Code	Devices Result Vo	Result Voltage Pin Combination			Remarks
	459	N/R	N _S	0 Ohms	50E-12 F	3 N/R	10 PASSED	600 N/R	13	236	13
	758	N/R	GN	1500 Ohms	100E-12 F	S N/R	10 FAILED	1100 N/R	13	252	13
04580		A CA	۲۰	Digital					SOWd		
	;					!			•	6	;
	020	N/N	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	5958 N/R	102	189	13
072		TEX	2	Linear, Op	Operational Amplifier	lifier			JFET		
	393	7860	SS	1500 Ohns	100E-12 F	1 N/R	1 FAILED	4000 N/R	102	252	13
580		TEX	2	Linear, Op	Operational Amplifier	lifier			JFET		
	393	0183	SS	150C Ohms	100E-12 F	1 N/R	1 FAILED	2500 N/R	102	252	13
100		N/R	2	Digital, C	Converter, A/D-D/A	-D/A			CMOS		
	030	N/R	N/R	1500 Ohms 100E-12	100E-12 F	1 N/R	1 FAILED	3000 N/R	103	252	13
10078119		TOO	~	Digital					Bipotar		
	736	1186 SS	SS	1500 Ohms	100E-12 F	18 N/R	6 PASSED	4000 N/R	2	252	3
10082603		HON N	2	Linear, Co	Comparator				Bipotar		
	736	1186 SS	88	1500 Ohms	100E-12 F	17 N/R	2 FAILED	3500 INPUT AND GROUND	5	252	3

RAC ESD Database

	:		g :	Punt Punt	;							
2 3300	ं भ	CC TOTAL	<u> </u>	tinear, car	Comparation	"ator				<u>Technology</u> Bipolar	λβλ	
		Test Test Test	155.	Test	1051		Wumber Date Number	Test	Test	Failure Teet		Learner
	2.7	System Eggs Type Resistance	SS SS	Resistar 1500 Ohn		Capacitance P	Pulses Code De	Result	Voltage Pin Combination	Criteria	× × ×	Remarks
				,				- PASSEU	4000 INPOL TO INPOL	2	252	m
10082503-101		HON	\sim 1	Linear, Comparator	Compar	ator				Bipolar		
	e e e e e e e e e e e e e e e e e e e		SS	1136 SS 1500 Chm		1008-12 F	17 8526	1 FAILED 2 FAILED	3500 VCC TO OUTPUT	2 2	252 252	мм
ž.,		8/%	-	inear, C	Operat	perational Amplifier	ifier			Bipolar		
	2	% .× .× .× .× .× .× .× .× .× .× .× .× .×	X X	1500 Ohms		100E-12 F	1 N/R	1 FAILED 1 FAILED	1250 N/R 2500 N/R	103 103	252 252	13
	228	N/N	SS	1500 Ohms		117E-12 F	30 N/R	5 FAILED	750 N/R	7	252	13
80.5		8/2	71	Digital,	Gate					ECL		
	37.5	N/R	SS	100 Ohms	s N/R		1 N/R	15 FAILED	59 OUTPUT(+) INPUT(-)	27	186	21
13130		α 2	z	Digital,	Latch					בכר		
	245	α 	ss 1	100 Ohms	s N/R		1 7634	15 FAILED	131 OUTPUT(+) [NPUT(-)	27	186	21
\$7.7		TOM	-	Digital,	Метогу,	y, RAM				ECL		
	127	N/R	<u> </u>	1500 Ohms		100E-12 F	1 N/R	15 FAILED	1000 N/R	27	252	12
4 10.		FSC		inear, ()perati	Lincar, Operational Amplifier	fier			Bipolar		
	026	0178 SS 100 Ohms	S	100 Ohms	s 200E-12	:-12 F	1 N/R	4 FAILED	293 OFF NULL(5)(+) V(-)(4)	33	285	13

RAC ESD Database

	Part ESD Mfr Class NSC 3	Part Descrip Linear,	tion Voltage Regulator				Technology Bipolar		1
Source D	Test Test Test Test Source Date Type Resi: 029 N/R N/R 1500	t Test Resistance 1500 Ohms	Test <u>Capacitance</u> 100E-12 F	Number Date Number Pulses <u>Code Devices</u> 1 N/R 1	Test Result FAILED	Voltage Pin Combination 6767 N/R	Failure Te <u>Criteria Re</u> 102	Test General Remarks Remarks 188	General Remarks 13
N, 030	N/R 2 N/R N/R	Linear, 1500 Ob	Voltage Regulator ms 100E-12 F	1 N/R	1 FAILED	4000 N/R	Bipolar 103	252	13
	MOT 2	Digital,	ite				ECL		
326	0281 SS MOT 1	100 Ohm: Digital,	s 200E-12 F Gate	1 Z /R	4 FAILED	440 N/R	32 ECL	285	55
392	1086 SS	1500 Ohms	100E-12 F	1 N/R	5 FAILED 5 FAILED	1250 EACH PIN TO 4 & 12 (+ -) 1250 EACH PIN TO 8 & 16 (+ -)	91	252 252	13
, ,	MOT 1	Digital, F	Flip-flop	2			ECL	25.5	7.
	1080 SS	Digital,	luue-12 ate	× ×) TAILEU	გ 1	נר פכר	767	2
392	1086 SS	1500 Ohms 100E-12	100E-12 F	1 N/R	5 FAILED	850 EACH PIN TO 8 & 16 (+ -)	19	252	13
	MOT	Digital,	Gate				ECL		
392	1086 SS	1500 Ohms	ms 100E-12 F	1 N/R	5 FAILED	1000 EACH PIN TO 4 & 12 (+ -)	19	252	13
_	N/R 1	Digital,	Gate				ECL		
923	N/R SS	1500 Ohm; 117E-12	117E-12 F	30 N/R	S FAILED	1500 N/R	85	252	13

RAC ESD Database

Part Number 10524		Part B	ESD Class	Part <u>Description</u> Digital, Gan	ion Gate				Technology ECL		1
	Source 392	t Test	Test Test Date Type 1086 SS	Test Test Test Date Type Resistance 1086 SS 1500 Obms	Test Test Test Test Test Number Source Date Type Resistance Capacitance Pulses 392 1086 SS 1500 Ohms 100E-12 F 1	Number Date Number Pulses Code Devices	Test Result FATIED	Voltage Pin Combination Combination Conference Conferen	Failure Test Criteria Remarks 19 252		General Remarks
	!				! }	:		THAN 16	6	145	5
10525		MOT	-	Digital, G	Gate				ECL		
	392		1086 SS	1500 Ohms	1'30E-12 F	1 N/R	5 FAILED	2000 EACH PIN TO 8 & 9 THEN 16	19	145	13
108		N N	-	Linear, Op	Operational Amplifier	e.			Bipolar		
	030	N/R	N/R	1500 Ohms	100E-12 F	N/R	1 FAILED 1 FAILED 1 FAILED	1250 N/R 1250 N/R 1250 N/R	103 103 103	252 252 252	£ £ £
	245	N/R	SS	100 Ohms	N/R	1 N/R 1	15 FAILED	214 INPUT(+) INPUT(-)	27	186	21
109		N/N	2	Linear,	Voltage Regulator				Bipolar		
	030	X X	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED 1 FAILED	10000 N/R 10000 N/R	103 103	252 252	13
109		FS.	7	Linear,	Voltage Regulator				Bipolar		
	390	N/R	S.	1500 Ohms	100E-12 F	5 N/R	1 PASSED	2000 S/R	105	242	:
11011		N L	~	Digital, M	Memory, RAM, Static	ú			PMOS		
	050	X/X	χ χ	1500 Ohms 100E-12	100E-12 F	1 N/R	1 FAILED	2109 N/R	102	189	13
11201		N/R	~	Linear,	Switch				JFET		
	030	N/R	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	6000 N/R	103	252	13

Part Number 11331		Part E	ESD Class	Part <u>Description</u> Linear, Switch	to				<u>Technology</u> JFET		!
	Test Source 030	Test ce Date N/R	Test Test Test Date Type Resi N/R N/R 1500	Ohms	Test Number Capacitance Pulses 100E-12 F 1	Date Number Code Device N/R	Test Result FAILED	Test Voltage Pin Combination 6000 N/R	Criteria Remar	1 ks	General Remarks 13
117	030	N/N N/N N/N	N/R 3	Linear, Volt 1500 Ohms 1	Voltage Regulator ns 100E-12 F 1	1 N/R	1 FAILED	10000 N/R	Bipolar 103	252	13
118		N/R	M	Linear, Oper	Operational Amplifier		FAILED	10000 N/R	103 Bipolar	252	13
	030	X / X	N/R	1500 Ohms 1	100E-12 F	1 N/R 1	1 FAILED	11000 N/R	103	252	13
119		N/R	~	Linear, Comp	Comparator				Bipotar		
	030	N/R	N/R	N/R N/R 1500 Ohms 100E-12 F		1 N/R 1	1 FAILED 1 FAILED	1500 N/R 1500 N/R	103 103	252 252	13
120		N/R	8	Linear, Volt	Voltage Regulator				Bipolar		
	030	Z Z	N/R	1500 Ohms 11	100E-12 F 1	N/R	FAILED FAILED FAILED FAILED	10000 N/R 10000 N/R 10000 N/R	103 103 103 103	252 252 252 252 252	£ £ £ £ £
124		¥ /R	-	Linear, Oper	Operational Amplifier				Bipolar		
	030	×/×		N/R 1500 Ohms 1	100E-12 F	1 N/R	1 FAILED 1 FAILED	1500 N/R 1500 N/R	103	252 252	13
	245	N/R	SS	100 Ohms N	N/R 1	1 N/R 15	15 FAILED	164 INPUT(+) GND(-)	27	186	21

Part ES Mfr Cl N/R Rest Test	ib Part ass Descript 3 Linear, Test Test	tch Test	Date	i	Test	Technology JFET Failure Tes		General
Source Date Iype Resistance C 030 N/R N/R 1500 Ohms 1	01 ←	Capacitance Pul 100E-12 F	Pulses Code Dev 1 N/R	Devices Result v	Voltage Pin Combination 6000 N/R	en	1 ks	Remarks 13
1 Linear, Compa	edux	Comparator				Bipolar		
N,R N/R 1500 Ohms 100		100E-12 F	1 N/R	1 FAILED 1 FAILED	2000 N/R 2000 N/R	103 103	252 252	13
N,'R SS 100 Ohms N/R	× ×		1 N/R	15 FAILED	102 V+(+) INPUT(-)	25	186	21
2 Digital, Gate	ate					CMOS		
N,R N/R 1500 Ohms 100E-12	100E	-12 F	1 N/R	1 FAILED 1 FAILED	3301 N/R 2856 N/R	102	188 188	13
1 Digital, Gate	ate					CMOS		
0478 SS 1500 Ohms 150E-12	150E-	12 F	1 N/R	3 FAILED 10 FAILED 10 FAILED 2 PASSED	850 INPUT A(+) INPUT B(-) 1450 INPUT A(+) INPUT B(-) 2060 INPUT A(+) INPUT B(-) 2060 INPUT A(+) INPUT B(-)	56 56 56 56	252 252 252 252	איטיטיט
1 Digital, Gate	ate					CMOS		
0478 SS 1500 Ohms 150E-12	150E-	12 F	1 N/R	3 FAILED 10 FAILED 10 FAILED 2 PASSED	1630 INPUT A(+) INPUT B(-) 2400 INPUT A(+) INPUT B(-) 3100 INPUT A(+) INPUT B(-) 3100 INPUT A(+) INPUT B(-)	56 56 56 56	252 252 252 252 252	יטיטיטיט
2 Digital, Register,	egiste	r, Shift				CMOS		
1.86 SS 1500 Ohms 100E-12	100E -	12 F	16 8640	3 FAILED	3000 INPUT TO GND	\$	252	m

Part		Part ESD Mfr Clas	ESD	Part	1					, i	į	
14013A	<u> </u>		-		, Flip	Flip-Flop				CMOS	Á	
	Test	t Test Test Test	Test	Test) C	Test	Number Date	Test	Test	Failure To		General
	13	113 0478 SS 1500 0hms	SS	1500 Ohms	ms 15	150E-12 F	1 N/R	3 FAILED	1200 RESET(+) CLOCK(-)	56 252		Kemarks 5
								10 FAILED	1560 RESET(+) CLOCK(-)	26	252	5
								10 FAILED	2150 RESET(+) CLOCK(-)	95	252	2
								2 PASSED	2150 RESET(+) CLOCK(-)	26	252	2
140138		MOT	-	Digital,		Flip-Flop				SUMU		
				,								
	114	0478 SS	SS	1500 Ohms 150E-12	ms 15	50E-12 F	1 N/R	3 FAILED	1550 DATA(+) RESET(-)	99	252	۷
								10 FAILED	2100 DATA(+) RESET(-)	92	252	יר ו
								2 PASSED	2500 DATA(+) RESET(-)	56	252	n in
14018		MOT	-	Digital,		Counter/Divider	۲			CMOS		
	200	N/R	NS.	1500 Ohms		100E-12 F	1 N/R	2 PASSED	400 N/R	82	252	13
	008	N/R	8	1500 Ohms		100E-12 F	1 N/R	2 PASSED	600 N/R	82	252	13
	600	N/R	8	1500 Ohms		100E-12 F	1 N/R	2 PASSED	800 N/R	82	252	13
	010	N/R	Š	1500 Ohms		100E-12 F	1 N/R	2 PASSED	1000 N/R	82	252	13
14021		INT	M	Digital,		Register, Shift	4			CMOS		
	029	N/R	N/R	N/R 1500 Ohms 100E-12	ns 10)0E-12 F	1 N/R	1 FAILED	4733 N/R	102	189	13
14046		¥01	-	Linear,	Phase	Phase Lock Loop				CMOS		
	200	N/R G	S	1500 Ohms		100E-12 F	1 N/R	2 FAILED	400 N/R	83	252	13

Part <u>Number (Cont'd)</u> 14046	(0	Part E	ESD Class	Part <u>Description</u> Linear, Pha	Phase Lock Loop					Technology	ology		
	Test Source 008		rest Type SN	Test Resistance 1500 Ohms	Test Capacitance 100E-12 F	Number D	Number Date Number Pulses Code Devices 1 N/R 2	Test Result FAILED	Test Voltage Pin Combination 600 M/R	Failure Test Criteria Remarks 82 252	Test Remarks 252	General S Remarks 2	~ «In
	600	N/R	S.	1500 Ohms	100E-12 F	Z C	N/R 2	2 FAILED	800 N/R	82	552	2 13	m
	010	N/R	N	1500 Ohms	100E-12 F	Z F	N/R 2	2 FAILED	1000 N/R	82	252	2 13	~
14049		MOT	-	Digital, In	Inverter, Buffer					CMOS			
	860	0278	N.	1500 Ohms	150E-12 F	15 N/R		1 FAILED	4500 ALL LEADS(+) GATE(-)	-) 56	252	2 13	~
	860	0278	S	1500 Ohms	150E-12 F	40 N/R		29 PASSED	4500 ALL LEADS(+) GATE(-)	-) 56	252	2 13	~
	660	0278 GN		1500 Ohms	150E-12 F	2	N/R 2	2 FAILED	6000 ALL LEADS(+) GATE(-)	-) 56	252	13	••
	660	0278 GN		1500 Ohms	150E-12 F	15 N/R		4 FAILED	6000 ALL LEADS(+) GATE(-)	-) 56	252	13	
	660	0278	S.	1500 Ohms	150E-12 F	25 N/R		1 FAILED	6000 ALL LEADS(+) GATE(-)	.) 56	252	. 13	
	660	0278	N G	1500 Ohms	150E-12 F	40 N/R	-	3 FAILED 5 PASSED	6000 ALL LEADS(+) GATE(-) 6000 ALL LEADS(+) GATE(-)	56 (-	252	ជ ជ	
	100	0278 GN		1500 Ohms	150E-12 F	S N/R	4	FAILED	7000 ALL LEADS(+) GATE(-)	.) 56	252	13	
	100	0278	NS.	1500 Ohms	150E-12 F	15 N/R		10 FAILED	7000 ALL LEADS(+) GATE(-)	.) 56	252	13	
	100	0278	ВN	1500 Ohms	150E-12 F	25 N/R	ν.	FAILED	7000 ALL LEADS(+) GATE(-)	.) 56	252	. 13	
	100	0278	NS C	1500 Ohms	150E-12 F	40 N/R	6 2	9 FAILED 2 PASSED	7000 ALL LEADS(+) GATE(-) 7000 ALL LEADS(+) GATE(-)	56 (.	252	£ £	
	101	0278	N	1500 Ohms	150E-12 F	15 N/R	2	FAILED	7000 GATE(+) ALL LEADS(-)	.) 56	252	13	
	101	0278 GN		1500 Ohms	150E-12 F	40 N/R		10 PASSED	700 GATE(+) ALL LEADS(-)	.) 56	252	13	

		General Remarks	<u>. 2 </u>	; £	13	13	13	13	13	13		יטיטיט		20 20 20
λ£			252	252	252	252	252	252	252	252		252 252 252 252		252 252 252
Technology	CMOS	Failure Test Criteria Remarks	3 25 25	2 95	99	99	82	82	82	82	CMOS	56 56 56 56 56	SOWO	56 56 56
		Voltage Pin Combination	900 GATE(+) ALL LEADS(-)	1100 GATE(+) ALL LEADS(-)	1100 GATE(+) ALL LEADS(-)	1100 GATE(+) ALL LEADS(-)	400 N/R	600 N/R	800 N/R	1000 N/R		790 INPUT(+) VCC(-) 900 INPUT(+) VCC(-) 980 INPUT(+) VCC(-) 980 INPUT(+) VCC(-)		860 GATE(+) VSS(-) 1030 GATE(+) VSS(-) 1150 GATE(+) VSS(-)
		Number Date Number Test Te		10 FAILED	1 FAILED	1 PASSED	2 PASSED	2 PASSED	2 PASSED	2 FAILED		3 FAILED 10 FAILED 10 FAILED 2 PASSED		3 FAILED 10 FAILED PASSED
		umber Date	40 N/R	5 N/R	25 N/R	40 N/R	1 N/R	1 N/R	1 N/R	1 N/R	<u>.</u>	1 N/R	Ĺ	1 N/R
	, Inverter, Buffer	Test Capacitance 150F-12 F	150E-12 F	150E-12 F	150E-12 F	150E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	Digital, Inverter, Buffer	150E-12 F	Digital, Inverter, Buffer	150E-12 F
Part <u>Description</u>	Digital, Ir	Test Test Test Date Type Resistance 0278 GN 1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	Digital, Ir	1500 Ohms 150E-12	Digital, Ir	1500 Ohms 150E-12
Part ESD Mfr Class	-	E Date Type Resis		0278 GN	0278 GN	0278 GN	N/R GN	N/R GN	N/R GN	N/R GN	MOT 1	0478 SS	MOT 1 (0278 SS
(Cont'd)		Test Source	102	103	103	103	200	800	600	010	~	115	-	093
ا	14049										14049A		14049B	

		General	Remarks	^	2	2	2	2		13	13	13 13	13		~ ~ ~ ~ ~			2 2 2
≿		Test Ge		757	252	252	252	252		252	252	252 252	252		252 252 252 252	3		252 252 252
Technology	CMOS	Failure Te	Criteria Remarks	8 7	26	95	95	26	CMOS	82	82	82 82	82	CMOS	56 56 56 56	2	CMOS	56 56 56
			Voltage Pin Combination	(30 INPOI(*) VCC(*)	920 INPUI(+) VCC(-)	1070 INPUT(+) VCC(-)	1070 INPUT(+) VCC(-)	1150 GATE(+) VSS(-)		400 N/R	600 N/R	800 N/R 800 N/R	1000 N/R		1360 VEE(+) SELECT A(-) 2000 VEE(+) SELECT A(-) 2510 VEE(+) SELECT A(-) 2510 VEE(+) SFLECT A(-)			700 VDD(+) GATE(-) 1370 VDD(+) GATE(-) 1720 VDD(+) GATE(-)
		Number Test	Devices Result	3 141150	10 FAILED	10 FAILED	2 PASSED	10 FAILED		2 PASSED	2 PASSED	1 FAILED 1 PASSED	2 FAILED		3 FAILED 10 FAILED 10 FAILED 2 PASSED			3 FAILED 10 FAILED 10 FAILED
		Date	ses Code	۲ ۲				1 N/R		1 N/R	1 N/R	N/R	1 N/R		1 N/R			1 N R
Part Description	Digital, Inverter, Buffer	Test	Source Date Type Resistance Capacitance Pulses	305				1500 Ohms 150E-12 F	Digital, Inverter, Buffer	1500 Ohms 100E-12 F	1500 Ohms 100E-12 F	1500 Ohms 100E-12 F	1500 Ohms 100E-12 F	Linear, Switch	1500 Ohms 150E-12 F		Digital, Inverter, Buffer	1500 Ohms 150E-12 F
ESD	-	Test Test	e Type F	2				02 78 \$\$ 1	-	N S	S.	e. C.	N G	-	0478 SS 1		-	S
Part Mfr	MOT	t Tes	rce Dat	5					MOT	N/R	N/R	N/N	Z/Z	MOT			\$	0278
(Cout 'd)		rest	Sou 11	-				260		200	008	6 00	010		117			<u> </u>
- 1	86+C+,								14050					140538			· ·	

- 1	(Cont.a)	Part ESD Mfr Class		רא				Technology	λb	
meant.		¥01	Digital, 1	Digital, Inverter, Buífer	er			CMOS		
	Test Source	Test Test Test Test Source Date Type Resident	t Test <u>e Re</u> sistanc <u>e</u>	Test Capacitance	Number Date Number Pulses Code Devices	Test Result	Test Voltage Pin Combination	Failure T	Test (General
	087	0278 SS		150E-12 F	N/R		1720 VDD(+) GATE(-)	56		5
	091	0278 GN	1500 Ohms	150E-12 F	1 N/R	18 FAILED	1125 VDD(+) GATE(-)	56	252	13
						7 PASSED	1125 VDD(+) GATE(-)	99	252	13
	760	0278 SS	1500 Ohms	150E-12 F	1 N/R	3 FAILED	760 VDD(+) GATE(-)	26	252	5
						10 FAILED	1380 VDD(+) GATE(-)	26	252	5
							1800 VDD(+) GATE(-)	26	252	5
						2 PASSED	1800 VDD(+) GATE(-)	99	252	2
	960	0278 GN	1500 Ohms	150E-12 F	1 N/R	25 PASSED	600 VDD(+) GATE (-)	26	252	13
	960	0278 GN	1500 Ohms	150E-12 F	1 N/R	7 FAILED	1125 VDD(+) GATE(-)	56	252	5
						18 PASSED	740 VDD(+) GATE(-)	56	252	13
	260	0278 GN	1500 Ohms	150E-12 F	1 N/R	14 FAILED	920 VDD(+) GATE(-)	26	252	13
						11 PASSED	920 VDD(+) GATE(-)	26	252	13
1408		N/R 3	Digital, Co	. Converter. A/D-D/A	-D/A					
				•				Bipotar		
	030	N/R N/R	N/R 1500 Ohms 100E-12	100E-12 F	1 N/R	1 FAILED 1 FAILED 1 FAILED	5000 N/R 5000 N/R 5000 N/R	103 103 103	252 252 252	£1 £1
- 71 -		F SC 2	Linear Vol	Voltade Requiator	L					
								Bipolar		
	390	N/R GN	1500 Ohms	100E-12 F	5 N/R	1 PASSED 1 PASSED	2000 S/R 2000 S/R	105	247	= =
14511		MOT 2	Digital, De	, Decoder				SOWO		
	900	0878 55	1500 Ohms 100E-12 F	100E-12 F	1 N/R	1 FAILED	3000 INPUT(1)(+) OUT(15)(-)	8	167	13

Part Number (Co	(Cont'd)	Part ESD Mfr Cla	ESD	Part Description	c				Technology	>	
14511			2	Digital,	Decoder				CMOS]
	Sour 006	Test Test Test Test <u>Source Date Type Resis</u> 006 0878 SS 1500	t Test <u>e Iype</u> 8 SS	t Test Resistance 1500 Ohms	Test <u>Capacitance</u> 100E-12 F	Number Date Number Test Pulses Code Devices Resu 1 N/R 1 FALLE	#1 e e	Voltage Pin Combination 3500 INPUT(3)(+) OUT(13)(-) 2500 INPUT(1)(+) OUT(15)(-)	Failure Tr Criteria & 81	Test Ge Remarks Re 167	General Remarks 13
145155	393	MOT 0984	1 28	Digital, Tr 1500 Ohms	Transceiver		2 FAILED	COOK) STINDITY SCOOK	CMOS 102	720	Ę
14519		¥ 01	-		ate				SOWO	r j	Ž
	200	N/R	N O	1500 Ohms 100E-12 F	100E-12 F	1 N/R	2 PASSED	400 N/R	82	252	13
	800	N/R	NS	1500 Ohms	100E-12 F	1 N/R	2 PASSED	600 N/R	82	252	13
	600	N/R	Š	1500 C!. ns	100E-12 F	1 N/R	2 PASSED	800 N/R	82	252	13
	010	X / X	Š	1500 Ohms	100E-12 F	1 N/R	2 PASSED	1000 N/R	82	252	13
14524		MOT	2	Digital, Me	Memory, PROM				CMOS		
	393	0385	0385 SS	1500 Ohms 100E-12	100E-12 F	1 N/R	2 FAILED 3 FAILED	3000 15(INPUT) 16(VDD) 4000 2(INPUT) 16(VDD)	102 102	252 252	£1 £1
14568		MOT	2	Digital, Co	Counter/Divider	,			CMOS		
	393	7860	0984 SS	1500 Ohms	100E-12 F	1 N/R	1 FAILED	3000 N/R	102	252	13
1458		N/R	2	Linear, Ope	Linear, Operational Amplifier	ifier			Bipolar		
	030	N/R		N/R 1500 Ohms	100E-12 F	1 N/R	1 FAILED	2500 N/R	103	252	13

<u>Technology</u> Bipolar	Failure Test General C <u>riteria Remarks Remarks</u> 103 252 13	Bipolar 103 252 13 103 252 13	Bipolar 103 252 13	Bipolar 105 247 11	Bipolar 102 188 13	Bipolar 103 252 13 103 252 13	Bipolar 102 188 13
Te Bii							
	Test Voltage Pin 2500 N/R	10000 N/R 10000 N/R	2500 N/R	2000 S/R	5546 N/R	6000 N/R 6000 N/R	4491 N/R
	Number Date Number Test Pulses Code Devices Result Voltage Pin Combination 1 N/R 1 FAILED 2500 N/R	1 FAILED 1 FAILEO	1 FAILED	1 PASSED	1 FALLED	1 FAILED 1 FAILED	1 FAILED
plifier	Number Date Pulses Code 1 N/R	tor 1 N/R	plifier 1 N/R	plifier 5 N/R	er 1 N/R	7 N/R	iver 1 N/R
ion Operational Amplifier	Test Test Number Resistance Capacitance Pulses 1500 Ohms 100E-12 F 1	Voltage Regulator IS 100E-12 F	Operational Amplifier s 100E-12 F 1	Operational Amplifier s 100E-12 F S	Line/Bus Driver 100E-12 F	Line/Bus Driver ; 100E-12 F	Line/Bus Receiver . 100E-12 F
Part <u>Descript</u> Linear,		Linear, 1500 Oım	Linear, Opo 1500 Ohms	Linear, 1500 Ohm	3 Digital, Line/Bus D N/R 1500 Ohms 100E-12	Digital, 1500 Ohms	3 Digital, Li N/R 1500 Ohms
ESD Class 2	t Test IVPE		2 N/R	2 8	3 N/R	x x/x	3 × × × ×
Part ESD Mfr Clas N/R	Test Test Source Date 030 N/R	x x x x x x x x x x x x x x x x x x x	N/R N/R	FSC N/R	MOT N/R	N/R N/R	MOT N/R
(Cont'd)	Test Sourc 030	030	030	390	029	030	020
Part Number 1458		1463	148	148	ر 80 80	1488	1489

Pant Number (Cont'd)	nt (d)	Part ESD Mir Cla	ESD	Part Descript	ion				Technology		ł
1530			-	Linear,	Operational Amplifier	lifier			Bipolar		
	Test	rTest	it Test	Test Test	Test	Date	Test	Test	failure Test		General
	Source 029	ce Date	Ite Type	e Resistance 1500 Ohms	Type Resistance Capucitance Pulses V/R 1500 Ohms 100E-12 F	Code N/R	Devices Result Vo	Voltage Pin Combination 1887 N/R	Criteria Remarks 102 188		Remarks 13
1533		M 01	-	Linear, Op	Operational Amplifier	lifier			Bipotar		
	026	N/R	N / N	1500 Ohms 100E-12	100E-12 F	1 N/R	1 FAILED	1413 N/R	102	188	13
155		N/R	~	Linear,	Operational Amplifier	lifier			BIFET		
	030	R/R	#/# 8/#	1500 Ohms	100E-12 F	~/x	1 FAILED 1 FAILED	6000 N/R 6000 N/R	103	252 252	13
15530-8		HAR	2	Digital,	Decoder				CMOS		
	436	1186	36 SS	1500 Ohms 100E-12	100E · 12 F	15 N/R	2 FAILED	2500 INPUT TO OUTPUT	5	28	ъ
	436		1186 SS	1500 Ohms	100E-12 F	18 N/R	2 FAILED	4000 INPUT TO COMMON	2	252	٣
1558		N/R	2	Linear,	Operational Amplifier	lifier			Bipolar		
	030	M/R	R N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	2500 N/R	103	252	13
\$5.		¥/8	ĸ	Linear,	Operational Amplifier	ulifier			BIFET		
	030	N/R	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	6000 N/R	103	252	13
\$\$;		518	2	Linear,	Operational Amplifier	lifier			Bipolar		
	620	N/R	R N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	3945 N/R	102	188	13

Part Number (Con	(Contid)	Part E	ESD	Part Description	on				Technology	Χ	ł
			~	Linear, Op	Linear, Operational Amplifier	Lifier			Bipolar		
	Test		Jest Test Test	Test	Test	Number Date Number	Test	Test	Failure Te	Test Ger	General
	Sour	Source Date	Type		Capaci tance	611		Voltage Pin Combination			Remarks
	950	0281	SS	100 Ohms	200E-12 F	1 N/R	4 FAILED	636 INPUT(2)(+) V(-)(4)(-)	33	285	13
1563		N/R	2	Linear, Vo	Linear, Voltage Regulator	cr			Bipolar		
	030	α ⁄z		N/R 1500 Ohms	100E-12 F	1 N/R	1 FAILED	3000 N/R	103	252	13
156A		N/R	m	Linear, Op	Linear, Operational Amplifier	lifier			Bipolar		
	030	χ Έ	α ×	1500 Ohms	100E · 12 F	1 N/R	1 FALLED	6000 N/R	103	252	13
1590		N/R	M	Linear, Op	Linear, Operational Amplifier	lifier			Bipolar		
	030	X / X	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	7000 N/R	103	252	13
150-		χ/ Υ	-	Linear					Bipolar		
	030	N/R	× ×	1500 Ohms	100E-12 F	1 N/R	1 FAILED	2000 N/R	103	252	13
159-6		TEX	z	Digital, G	Gate				DTL		
	050	N/R	N/R	15C0 Ohms	100E-12 F	1 N/R	1 FAILED	342741 N/R	102	188	13
1596		N/R	2	Linear					Bipolar		
	030	X /X		N/R 1500 Ohms	100E-12 F	1 N/R	1 FAILED	3000 N/R	103	252	13
1678		MOT	٣	Digital, C	Counter/Divider	Ĺ			ECL		
	020	N/R	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	11934 N/R	102	189	13

100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 -		Part ESD Mfc Clar S1G	SI M	Part <u>Description</u> Digital, Gai	Gate				Technology DTL	,	1
	Test Source	Test ce Date	Test Type N/R	Test Resistance 1500 Ohms	Capacitance 100E-12 F	Number Date Number Test Pulses Code Devices Resu 1 N/R 1 FAIL	#1 유	Test Voltage Pin Combination 7274 N/R	failure Test <u>Criteria Remar</u> 102	88 Ks	General Remarks
385		æ/∕æ		Digital, P	Procesting Unit, Central	t, Central			CMOS		
	030	N/N	N/8	1500 Ohms 100E-12	100E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13
1822		RCA	2	Digital, Me	Memory, RAM, Static	tatic			SOWO		
	383	N/R	SS	1500 Ohms	100E-12 F	1 N/R	1 FAILED	2018 OUT.(8)(+) APTT(-)	67	188	æ
558,		N/R	-	Digital, T	Transceiver,	Input-Output Port	.		CMOS		
	030	N/R	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED 1 FAILED	1000 N/R 1000 N/R	103	252 252	13
(6)		SIX	23	Linear, Sw	Switch				JFET		
	920	0281	SS	100 Ohms	200E-12 F	1 N/R	4 FAILED	750 V(-)(14)(+) INPUT(-)	39	285	13
8) (*)		Z/R	~	Linear					BIFET		
	030	× ×	N/N	1500 Ohms	100E-12 F	1 N/R	1 FAILED	2500 N/R	103	252	13
1000		TEX	8	Digital, R	Register, Shift	ų.			TTL		
	620	x / R	α/≭	1500 Ohms	100E-12 F	1 N/R	1 FAILED	7583 N/R	102	189	13
**************************************		×1S	~	Linear, Sw	Switch				CMOS		
	726	1186 SS	\$8	1500 Ohms	100E-12 F	18 N/R	5 PASSED	4000 N/R	5	252	M

	General Irks Remarks 252 3	252 3	252 3		252 3		252 13		252 3		252 20 252 20	15 13	252 13	252 13	100
Technology CMOS	Test	5	د	Ø	2	φ.	103		70	"		-	-	-	ς2
Techr CMOS	Failure <u>Criteria</u> 5			CMOS		SONM	Ì	111		NWOS					
	age Pin Combination 600 INPUT TO OUTPUT		400 INPUT TO OUTPUT		600 INPUT TO OUTPUT				800 INPUT TO OUTPUT						535 INBUICANCH CND(8)(-)
	Test Voltage Pin Combination 600 INPUT TO OUTPUT	4000 N/R	.00 INPU		.000 INPU		1000 N/R		800 INPUT		700 N/R 2000 N/R	1400 N/R	500 N/R	1000 N/R	135 TND11
	비유	5 PASSED	5 FAILED		5 FAILED		1 FAILED		1 FAILED		1 FAILED 1 FAILED	3 FAILED	1 PASSED	1 FAILED	6 FATIFO
	Number Date Pulses Code 5 N/R	18 N/R	3 N/R		5 N/R		1 N/R		6798 2	Stat c	1 N/R	4 N/R	200 N/R	25 N/R	1 N/R
ion Switch	Test Capacitance 100E-12 F	100E-12 F	100E-12 F	itch	100E-12 F	Memory, EAROM	100E-12 F		100E-12 F	Memory, RAM, 9	200E-12 F	200E-12 F	200E-12 F	200E-12 F	200E - 12 F
Part Descript Linear,	t Test Resistance 1500 Ohms	1500 Ohms	1500 Ohms	Linear, Switch	1500 Ohms	Digital, M	N/R N/R 1500 Ohms	Digital	1500 Ohms	Digital, M	1000 Ohms	1000 Ohms	1000 onms	1000 Ohms	100 Ohms
Part ESD Mfr Class SIX 1	Test Test Test Test Source Date Type Resident 436 1186 SS 1500	1186 SS	1186 SS	SIL 1	1186 SS	N/R 1	N/R N/R	MON 1	1186 SS	INT 1	W/R SS	N/R SS	N/R GN	V/R GN	0281 SS
(Cont.d)	Test Sourc 436	9£5	927		436		030	_	925		041	970	970	270	026
Part Number (201				201		2051		20L1D		2102					

Í		General	Remarks	13	13		13		21		13		13		13			13			55
χ,		Test Ge	marks Re	252	252		252		186		252		252		252			252			252
Technology	SOWN	Failure Te	Criteria Remarks	87	87	NMOS	-	NAOS	25	Bipolar	103	SOWN	103	NAC N	103	;	SO W	103	3071	000	103
		Test	Voltage Pin Combination	300 N/R	400 N/R		500 N/R		45 INPUT(+) GND(-)		11000 N/R		1000 N/R		1000 N/R			1000 N/R			1000 N/R
		Test	Code Devices Result Vo	2 FAILED	1 FAILED		1 FAILED		15 FAILED		1 FAILED		1 FAILED		1 FAILED			1 FAILED			1 FAILED
	Static	Number Date Number	Pulses	3 N/R		Static	20 N/R	Static	1 N/R		1 N/R	Static	1 N/R	Static	1 N/R		Static	1 L/R		Static	1 N/R
Part Description	Digital, Memory, RAM, Static	Test Test	Type Resistance Capacitance	1500 Ohms 100E-12 F		Digital, Memory, RAM, Static	1000 Ohms 200E-12 F	Digital, Memory, RAM, Static	100 Ohms N/R	Linear, Comparator	1500 Ohms 100E-12 F	Digital, Memory, RAM, Static	1500 Ohms 100E-12 F	Digital, Memory, RAM, Static	1500 Ohms 100E-12 F		Digital, Memory, RAM,	1500 Ohms 100E-12 F		Digital, Memory, RAM, Static	1500 Ohms 100E-12 F
S		Test				-	S	Σ.	SS	ω	N/R	-	N/R	-	N/R		-	N/R		-	8/8
Part ESD Mfr Cla		Test	Source Date	0860		S16	x X/8	۲/ ×	N/R	N/R	N/R	N/R	N/R	X /R	N/R		N/R	N/R		N/8	N/N
(Cont'd)		Test	Sour	001			970		572		030		030		030			030			030
Part	2102					2102		2102		211		2111		2114			2141		;	2147	

Part Number 2255		Part ESO Mfr Class MOT 1		Part Description Digital, Gat	ion Gate				Technology	X	
	Test	Test Test Test	est	Test		Number		Test	Failure Test		General
	800 029	Source Date To 029 N/R N	Type N/R	Resistance 1500 Ohms	Capacitance 100E-12 f	Pulses 1	Code Devices Result V	Voltage Pin Combination 268 N/R	Criteria Remarks 102 189		Remarks 13
2401		N/R	-	Digital, Me	Memory, EPROM				SOWN		
	023	N/R S	SS	1500 Ohms 117E-12	117E-12 F	30 N/R	5 FAILED	750 N/R	91	252	13
2516		K/R	-	Digital, M∈	Memory, EPROM				SOMN		
	030	N/R N	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13
	384	N/R S	SS	1000 Ohms	200E-12 F	1 N/R	1 FAILED 1 FAILED	300 EACH PIN(+) 700 EACH PIN(+)	52	140	57 72
2520HA		HAR	←	Linear, Ope	Operational Amplifier	lifier			Bipolar		
	436	1186 55		1500 Ohms	100E-12 F	11 8625	1 FAILED	1400 INPUT TO INPUT	í	558	8
2622		HAR	-	Linear, Ope	Operational Amplifier	lifier			Bipolar		
	030	N/R N/	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	2000 N/R	103	252	13
2622		1SL	-	Linear, Ope	Operational Amplifier	lifier			Bipolar		
	030	N/R N/	N/R 1	1500 Ohms	100E-12 F	1 N/R	1 FAILED	2000 N/R	103	252	13
2622		N/R	7 2	Linear, Ope	Operational Amplifier	lifier			Bipolar		
	030	N/R N	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	3000 N/R	103	252	13

Part		Part ESD	ESD	Part Description	Ĕ				Technology	χ.	
2650			-	Linear, Op	Operational Amplifier	er			Bipolar		
	Test Sourc 030	Test e Date N/R	Test Type N/R	Test Test <u>Type Resistance</u> N/R 1500 Ohms	Test <u>Capacitance</u> 100E-12 F	Number Date Number Test Pulses Code Devices Resul	er Test Test Ses Result Volts 1 FAILED 19	Test Test Result Voltage Pin Combination FAILED 1500 N/R	Failure Test Criteria Remarks 103 252	st Ge marks Re 252	General Renarks 13
26LS31		N/R	←	Digital, L	Digital, Line/Bus Driver				רצדור		
	030		χ ~	N/R N/R 1500 Ohms 100E-12	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
261.531		NSC	-	Digital, L	Digital, Line/Bus Driver				רצננר		
	436	1186 SS	SS	1500 Ohms	100E-12 F	5 N/R	1 FAILED	600 INPUT TO COMMON	<u>د</u>	252	ъ
26LS31		AMD	-	Digital, L	l, Line/Bus Driver				LSTTL		
	736	1186 SS	SS	1500 Ohms 100E-12	100E-12 F	3 N/R	2 FAILED	400 INPUT TO OUTPUT	2	252	ю
261.532		N/R	-	Digital, L	, Line/Bus Receiver				LSTTL		
	030		× ×	N/R N/n 1500 Ohms 100E-12	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
261 532		AMD	-	Digital, (, Line/Bus Receiver				LSTTL		
	736	1186 SS	SS	1500 Ohms	1500 Ohms 100E-12 F	4 N/R	2 FAILED	S00 INPUT TO COMMON	₹	230	M
261833		AMD	-	Digital, I	Digital, Line/Bus Receiver				רצנור		
	9£7	1186	SS	1500 Ohms	1500 Ohms 100E-12 F	4 8420	2 FAILED	500 INPUT TO OUTPUT & COMMON	1	252	6
	736	1186 SS	SS	1500 Ohms	100E-12 F	6 8420	2 FAILED	700 OUTPUT TO COMMON	5	252	3

37	est General		252 13		252 13	121 24 135 24 121 24 136 24		252 13	237 13		252 13	117 24 132 24		252 13
Technology	Failure Test Criteria Remarks	Bipolar	103	SOWN	103	52 52 52 53	NMOS	102	13	SOWN	103	52	HMOS	13
	Test Voltage Pin Combination 2000 INPUT TO COMMON		1000 N/R		1000 N/R	800 EACH PIN(+) 400 EACH PIN(+) 1500 EACH PIN(+) 500 EACH PIN(+)		3500 N/R	600 N/R		1000 N/R	600 EACH PIN(+) 3000 EACH PIN(+)		1200 N/R
	Number Date Number Test T Pulses Code Devices Result v 14 N/R 1 FAILED		1 FAILED		1 FAILED	1 FAILED 1 FAILED 1 FAILED 1 FAILED		1 FAILED	10 PASSED		1 FAILED	1 FAILED 1 FAILED		10 PASSED
er	Number Date Pulses Code 14 N/R		1 N/R		1 N/R	1 N/R		1 N/R	3 N/R		1 N/R	1 N/R		5 N/R
Part <u>Description</u> Digital, Line/Bus Receiver	Test stance Capacitance Ohms 100E-12 F	Linear, Voltage Reference	N/R 1500 Ohms 100E-12 F	Digital, Memory, EPROM	1500 Ohms 100E-12 F	1000 Ohms 200E-12 F	Digital, Memory, EAROM	1500 Ohms 100E-12 F	0 Ohms 50E-12 F	Digital, Memory, EPROM	1500 Ohms 100E-12 F	1000 Ohms 200E-12 F	Digital. Yemory, EPROM	1500 Ohms 100E-12 F
ESD Class	Test Test Test Test Source Date Type Resis 436 1186 SS 1500	-	N/R N/R	←	X /R	SS	2	0984 SS	X	-	N/R	SS	1 0	₹
j	est Te ource Da 36 11	N/R	030 N/	N/R	030 N/R	384 N/R	INI	393 094	429 N/R	N/R	030 N/R	384 N/R	N L	428 N/R
Part Number (Cont'd) 26LS33	⊢ osi of		Ö		0	M		35	74		07	35		25
Part Number 26LS33		2702		2708			27128			2716			27256	

Technology HMOS	Failure Test General Criteria Remarks Remarks 13 237 13	NMOS 102 252 13	NMOS 52 122 24 52 99 24	HMOS	13 252 13	13 237 13	HMOS	13 252 13	13 237 13	STIL	103 252 13	S11L	103 252 13
	Test Voltage Pin Combination 600 N/R	2500 N/R	1500 EACH PIN(+) 500 EACH PIN(+)		1200 N/R	600 N/R		1200 N/R	600 N/R		1000 N/R		1000 N/R
	Number Test Devices Result 10 PASSED	1 FAILED	1 FAILED		10 PASSED	10 PASSED		10 PASSED	10 PASSED		1 FAILED		1 FAILED
	Number Date Pulses Code 3 N/R	1 N/R	1 N/R		5 N/R	3 N/R		5 N/R	3 N/R		1 N/R		0/1/2
Part ESD Part (d) Mfr Class Description INT 1 Digital, Memory, EPROM	Test Test Test Test Test Source Date Type Resistance Capacitance 429 N/R " 0 Ohms 50E-12 F	1NT 2 Digital, Memory, EPROM 393 0383 SS 1500 Ohms 100E·12 F	N/R 1 Digital, Memory, EPROM 384 N/R SS 1000 Ohms 205E-12 F	INT 1 Digital, Memory, EPROM	428 N/R GN 1500 Ohms 100E-12 F	429 N/R GN 0 Ohms 50E-12 F	INT 1 Digital, Memory, EPROM	428 N/R GN 1500 Ohms 100E-12 F	429 N/R GN 0 Ohms 50E-12 F	N/R 1 Digital, Memory, PROM	030 N/R N/R 1500 Ohms 100E-12 F	N/R 1 Digital, Memory, PROM	3 61,3004 3110 0014 00
Part <u>Number (Cont'd)</u> 27256		2732	2732	27512			2764			27813		278190	

Part		Part ESD Mfr Class		ايَ					Technology	75	1
27520		α Σ	1 Digital	al, Memory,	, PROM				STTL		
	Test	Test Te	Test Test Test	Test		Date	fest	Test			General
	30Ur 026	ource Date Type Resistance 026 0281 SS 100 Ohms	<u>pe Resist</u> 100 C	tance Capacita	ance F	Pulses Code De	Devices Result v	Voltage Pin Combination 263 N/R	Criteria &	Remarks Re 285	Remarks 13
275291		AMD	1 Digital	•	Memory, PROM				STTL		
	393	SS 7860		1500 Ohms 100E-12	:-12 F	1 N/R	1 FAILED	500 5(INPUT) 12(GND)	102	252	13
28C256		SEQ	2 Digital		Memory, PROM				MOS		
	436	1186 SS		1500 Ohms 100E-12	12 F	16 8718	1 FAILED 1 FAILED	5000 INPUT TO OUTPUT 3000 INPUT TO COMMON	īv īv	252	m m
2901		AMD	1 Digital		Processing Unit, Central	, Central			T2115		
	383	N/R SS		1500 Ohms 100E-12	:-12 F	1 N/R	1 FAILED T FAILED T FAILED	774 CP(+) APTI(-) 183 F=0(+) APTI(-) 57286 VCC(+) APTI(-)	64 67	188 188	ထဆဆ
2901		x /x	1 Digital,		Processing Unit, Central	, Central			11151		
	030	N/R N/R	R 1500 Ohms	ეჩოs 100E-12	:-12 F	1 N/R	1 FALLED	1500 N/R	103	252	13
5006		æ/ ×	1 Oigital,		Promessing Corr	2 2 2 2 3			ij.		
	030	N/8	and a	: : :			••• •				
2910		8/N	}e.16.€ .	147 57 6 TH							
	030	N/R N/R	R 1500 Ohms	ohms 100E-12	-12 F	N/N	3	(2) (2) (3) (4) (5)	-	202	5.

Part Number 2930		Part E	ESD Class	Part Josephpion Digital, Processing Unit,	, Central			<u>lechnology</u> LS11L		1
	Source 030	Test Test Source Date 030 N/R	t Test <u>e Type</u> N/R	Test Test Test N Type Resistance Capacitance P N/R 1500 Ohms 100E-12 F	Number Date Number Pulses Code Devices 1 N/R	Test Test Result Velta 1 FAILED 15	Devices Result Veltage Pin Combination 1 FAILED 1500 N/R	Failure Test Criteria Remarks 103 252	General Brks Remarks 252 13	ral rks 13
3001	÷28	INT N/R	GN	Digital 1500 Ohms 100E-12 F	5 ×/8	10 FAILED	412 PINS 23 AND 24	Bipolar 13	252	13
3002	758	INT N/N	GN	Digital 1500 Ohms 100E-12 F	5 N/R	10 FAILED	425 PINS 16,24,26, AND 27	Bipolar 13	252	13
3003	758	1N1 N/R		Digital 1500 Ohms 100E-12 F	5 N/R	10 FAILED	512 PINS 2 AND 17	Bipolar 13	252	13
301	030	х х х/х	× × ×	Linear, Operational Amplifier 1500 Ohms 100E-12 E	inter in/R	' FAILED	1250 N/R	Bipolar 103	252	13
301	029	MOT N/R	x x x	Linear, Operational Amplifier 1500 Ohms 100E-12 f	Lifier 1 N/R	1 FAILED	82092 N/R	Bipolar 102	188	13
3015	050	RCA N/R	N /R -1	Linear, Operational Amplifier 1500 Ohms 100E-12 F	infier 1 N/R	1 FAILED	1958 N/R	Bipolar 102	189	13
302	620	NSC N/R		3 Linear, Operational Amplifier N/R 1500 Ohms 190E-12 E	olifior 1 N/R	1 FAILED	10,809 N/R	Bipolar 102	188	13

Part Number 304		Part ESO Mfr Cla	ESO Class	Part Descripti Digital	On Tipes/Bus Driver				Technology	>	ļ
t o o			r	, Je .	/bus Uriver				ECL		
	Fest	t Test rce Date	Test Test Test Date Type Resis	stance	Test Number Capacitance Pulses	Number Date Number Test Pulses Code Devices Result		Test Voltage Pin Combination	Failure Te	Test Ger Pemarks Per	General
	570	N/R	N/R	1500 Ohms		N/R		13991 N/R			13
308		MOT	8		Linear, Operational Amplifier				Bipolar		
	059	N/R	N/R	1500 Ohms 10	100E-12 F 1	N/R	1 FAILED	6257 N/R	102	188	13
303		N/R	•	Linear, Opera	perational Amplifier				Bipolar		
	030	x x		N/R 1500 Ohms 10	100E-12 F	1 N/R 1	1 FAILED 1 FAILED	1250 N/R 1250 N/R	103 103	252 252	13
309		N/R	8	Linear, Volta	oltage Regulator				Bipolar		
	030	N/R		N/R 1500 Ohms '00	.00E-12 F	N/R 1	FAILED FAILED FAILED	10000 N/R 10000 N/R 10000 N/R	103 103 103	252 252 252	13 13 13
3101		F.N.	М	Digital, Menor	Menory, RAM, Static				STTL		
	020	N/R	N/R	1500 Ohms 100	100E-12 F	1 N/R 1	1 FAILED	8060 N/R	102	189	13
311		FSC	-	Linear, Comparator	rator				Bipolar		
	383	N/R	SS	1500 Ohms 100	100E-12 F 1	1 N/R 1	1 FAILED 1 FAILED	295 IN.(+) APTT(-) 23485 CLOCK(+) APTT(-)	67	188 188	& &
311		α/α	~	Linear, Comparator	ator				Bipolar		
	030	χ/χ		N/R 1500 Ohms 100	100E-12 F 1	1 N/R 1	1 FAILED	11000 N/R	103	252	13

Part ESD N/R Class N/R 3 Test Test Test Source Date Ivpe	Part <u>Description</u> Linean, Con Test Resistance	Comparator Test Number	Number Date Number Pulses Code Devices	Test	Test Voltage Pin Combination	Bipotar Bipotar Failure Test Criteria Remarks	Zst General	r. Prat
1500 Ohr) — Q	is 100E-12 F	N/R	FAILED	10000 N/R	103		13
		u.	16 N/R 1	1 FAILED 1 FAILED	3000 COMMON TO OUTPUT 3000 INPUT TO COMMON	? ?	252 252	mm
1530 Ohms	-	100E-12 F	9 N/R 1	FAILED	1900 VCC TO GND	5	252	٣
1500 Ohms	~	100E-12 F 1	11 N/R 1	FAILED	1400 VCC TO GND	ſΩ	252	М
Linear, Vol	نو	Voltage Regulator				Bipolar		
1500 Ohns 1		100E-12 F	1 N/R 1	1 FAILED	6253 N/R	102	188	13
Linear, Volta		Voltage Regulator				Bipolar		
1500 Jhms 1		100E-12 F	1 N/R	1 FAILEO	10000 N/R	103	252	13
Linear, Oper		Operational Amplifier	۲			Bipotar		
1500 Ohms	_	100E-12 F	1 N/R 1	1 FAILED	11000 N/R	103	252	13
Linear, 3om	Ω.	lomparator				Bipolar		
1500 Ohms		100E-12 F	1 N/R 1	1 FAILED	1500 N/R	103	252	13
Linear, Vol	-	Voltage Regulator				Bipolar		
1500 Ohms	-	100E-12 F	1 N/R 1	1 FAILED	10000 N/R	103	252	13

W/R 1 Linear, Operational Amplifier 1500 W/R 1500 Owns 100E-12 F 1 M/R 1 FAILED 1500 W/R 100 Owns 100E-12 F 1 M/R 1 FAILED 1500 W/R 100 Owns 100E-12 F 1 M/R 1 FAILED 1500 INPUT(A)(+) VSS(3)(-) 104 96 1 FAILED 100 Owns 100E-12 F 1 M/R 1 FAILED 100 Owns 100 Owns 100E-12 F 1 M/R 1 FAILED 100 Owns 100 Own	Number (Cont'd) 320 50 50 50 50	Part N/R N/R Source Da 030 N/	Part ESD Part Mfr Class Desc N/R 3 Line Test Test Test E Date Type Resis	3 Li 3 Li 1 Type Re N/R 15	ript ar, ohm	tage Reg	Number Number Pulses	er Date Number	Test Result FAIL'D FAILED	Voltage Pin Combination 10000 P/R 10000 N/R 10000 N/R	Technology Bipolar Failure Tes Criteria Rem 103 103	t 252 252 252 252	General Remarks 13
HYB I Digital, Converter, A/D-D/A O980 SS 1500 Ohms 10CE-12 F 1 N/R 1 FAILED 500 IMPUT(6)(+) VSS(3)(-) 04 79 1 FAILED 500 IMPUT(4)(+) VSS(3)(-) 104 89 1 FAILED 500 IMPUT(5)(+) VSS(3)(-) 104 183 1 FAILED 500 IMPUT(5)(+) VSS(3)(-) 104 96 1 FAILED 600 IMPUT(5)(+) VSS(3)(-) 104 96 1 FAILED 600 IMPUT(5)(+) VSS(3)(-) 104 96 1 FAILED 10000 N/R 103 252	.00	Z	œ		inear, C	Operational	Amplifi F		1 FAILED	1500 N/R	Bipolar 103	252	13
N/R 1 Linear, Comparator Bipolar N/R N/R 1500 Ohms 100E-12 F 1 N/R 1 FAILED 2000 N/R 103 252 N/R 3 Linear, Voltage Regulator 1 FAILED 10000 N/R 103 252 N/R 1 SOO Ohms 100E-12 F 1 N/R 1 FAILED 10000 N/R 103 252 1 FAILED 10000 N/R 1 FAILED 10000 N/R 103 252 1 FAILED 10000 N/R 10000 N/R 103 252 1 FAILED 10000 N/R 103 252	Ö	Ŧ,	\$ 0860 SS	y- -	igital, 300 Ohm≲	Converter,	A/D-D/A		I FAILED I FAILED I FAILED I FAILED I FAILED I FAILED	500 INPUT(6)(+) VSS(3)(+) 800 INPUT(4)(+) VSS(3)(+) 500 INPUT(8)(+) VSS(3)(+) 300 INPUT(7)(+) VSS(3)(+) 500 INPUT(4)(+) VSS(3)(+)	CMOS 04 104 104 104	79 96 89 183 79 89	21 22 22 22 22 22 22 22 22 22 22 22 22 2
N/R N/R 1500 Ohms 100E-12 F 1 N/R 1 FAILED 10000 N/R 103 252	:0	ž ž	χ.			comparator ; 100E-12 /oltage Regi	r ulator			200U N/R	Bipolar 103 Bipolar	252	13
	<i>ੋਂ</i>	ច		78 15 1 0 i	gital,	; 100E-12	₩	1 N/R	1 FAILED 1 FAILED 1 FAILED 1 FAILED	10000 N/R 10°00 N/R 10000 N/R 10000 N/R	103 103 103 103 CMOS	252 252 252 252 252	13 13 15 15 15

Part Number (Cont'd) 3400	(p, 1	Part ESD Mfr Class G1 1	%l -	Part <u>Description</u> Digital, Mer	Description Digital, Memory, EAROM				Technology CMOS	76	
	Fest Source 383	Test Test Test Test Source Date Type Resistance 383 N/R SS 1500 Ohms	est Te <u>YPe Re</u> S 15	Test Resistance 1500 Ohms	Test Capacitance 100E-12 F	Number Date Number Pulses Code Devices 1 N/R 1	Test Result FAILED	Test Voltage Pin Combination 144 VOD(+) APIT(-) 14024 A5(9)(+) APIT(-)	Failure Test Criteria <u>Remarks</u> 49 188		General Remarks 8 8
34001		MOT	1 Li	Linear, Op	Operational Amplifier	lifier			BIFET		
	027	N/R GN		1500 Ohms	100E-12 F	1 N/R	8 FAILED 7 PASSED	1000 N/R 1000 N/R	<i>7</i> 5	252	12
34001		FSC	1 Li	near, Op	Linear, Operational Amplifier	lifier			BIFET		
	123	0478 SS		1500 Ohms	150E-12 F	. Z/R	10 FAILED 10 FAILED 3 FAILED 2 PASSED	1800 INPUT B(+) INPUT A(-) 1450 INPUT B(+) INPUT A(-) 1150 INPUT B(+) INPUT A(-) 1800 INPUT B(+) INPUT A(-)	56 56 56 56 56	252 252 252 252	יטיטיטיט
3403		MOT	1 Li	Linear, Ope	Operational Amplifier	lifier			Bipolar		
	027	N/R GN		1500 Ohms	100E-12 F	1 N/R	6 FAILED 9 PASSED	1000 N/R 1000 N/R	<i>7</i>	252	12 12
340498		FSC	1 01	gital, II	Digital, Inverter, Buffer	Ja			CMOS		
	125	0478 SS		1500 Ohms 150E-12	150E-12 F	Z/Z	3 FAILED 10 FAILED 10 FAILED 2 PASSED	1100 INPUT(+) OUTPUT(-) 1280 INPUT(+) OUTPUT(-) 1480 INPUT(+) OUTPUT(-) 1480 INPUT(+) OUTPUT(-)	56 56 56 56	252 252 252 252	2 2 2 2
34050941-001		HYC	1 019	Digital, Co	l, Converter, A/D-D/A	-0/A			Bipolar		
	436	1186 55		1500 Ohms 100E-12	100E-12 F	14 N/R	1 FAILED	2000 IMPUT-GND AND GND-OUTPUT	2	252	m

Part Number		Part ESD Mfr Class	S	Part Description	c				Technology	>	
34054597				near, Op	Linear, Operational Amplifier	ifier			Bipolar		
	Test	Test Test Test	est Te	sst	Test	Date	Test	Test	Failure Te		General
	300L	<u>Source Date IYPe Resistance</u> 436 1186 SS 1500 Ohms	S IK	1500 Ohms	Capacitance 100E-12 F	Pulses Code Devi	Devices Result Vo	Voltage Pin Combination 1500 INPUT TO GND	Criteria Re	Remarks Res 252	Remarks 3
34054597-001		NOH	ا ت	near, Op	Linear, Operational Amplifier	ifier			Bipolar		
	436	1186 SS		1500 Ohms	100E-12 F	12 N/R	1 FAILED	1500 INPUT TO GND	2	252	ъ
34056230-001		LTC	3 Li	near, Ope	Linear, Operational Amplifier	ifier			Bipolar		
	436	1186 SS		1500 Ohms	100E-12 F	18 N/R	1 PASSED	40C0 N/R	2	252	8
000 000000						;					
3 40 6 9508-100		101	5	Digital, Me	Memory, RAM, St	Static			CMOS		
	436	1186 SS		1500 Ohms	100E-12 F	5 8641	1 FAILED	600 INPUT AND COMMON TO GND	2	252	m
34371		HAR	1 Di	Digital, Me	Memory, PROM				Bipolar		
	392	0886 55		- 11	100F-12 F	α/α	3 FATI FD	1000 FACH DIN TO GND & VCC	0	15,6	5
) 1					ź			<u> </u>	<u> </u>	2
344		NSC	ا ت	near, Ope	Linear, Operational Amplifier	ifier			Bipolar		
	052	0681 SS	0	Ohms	100E-12 F	1 N/R	1 FAILED	EACH	12.1	171	51
							FAILED 3 FAILED	SOU EACH PIN	51	2 5	១ ជ
	053	0681 SS		1500 Ohms	100E-12 F	1 N/R	2 PASSED	1500 EACH PIN	51	171	51
	420	0581 SS	0	Ohms	125E-12 F	12 N/R	1 FAILED	600 N/R	18	170	13
348		N/R	2 Li	near, Ope	Linear, Operational Amplifier	ifier			Bipolar		
	030	N/R N/	N/R 15	1500 Ohms	100E-12 F	1 N/R	1 FAILED	2500 N/R	103	252	13

Part Number 351	Part ESD Mfr Class MOT 1	Part Description Digital, Gate	I echn ECL	Technology ECL	
7es 80u 029	Test Test Test Test <u>Source Date Type Resistance</u> 029 N/R N/R 1500 Ohms	t Test Test Number Date Number Test Test Resistance Capacitance Pulses Code Devices Result Voltage Pin Combination 1500 Ohms 100E-12 F 1 N/R 1 FAILED 1576 N/R	:	re Test <u>ria Remarks</u> 102 189	Failure Test General C <u>riteria Remarks Remarks</u> 102 189
	N/R 3	Linear, Operational Amplifier	81.FET	.	
030	N/R	N/R 1500 Ohms 100E-12 F 1 N/R 1 FAILED 6000 N/R	N/R 103	03 252	2 13
	N/R 3	Linear, Operational Amplifier	BIFET	_	
030	N/R	N/R 1500 Ohms 100E-12 F 1 N/R 1 FAILED 6000 N/R 1 FAILED 6000 N/R	N/R 103 N/R 103	03 252 03 252	2 13 2 13
	N/R 3	Linear, Operational Amplifier	BIFET		
030	N/R	N/R 1500 Ohms 100E-12 F 1 N/R 1 FAILED 6000 N/R		103 252	2 13
	TEX 3	Digital, Converter, A/D-D/A	Bipolar	lar	
050	N/N	N/R 1500 Chms 100E-12 F 1 N/R 1 FAILED 12930 N/R	N/R 102	02 188	8 13
	VAR 2	Digital, Latch	Bipolar	lar	
727	4 1083 SS	1500 Ohms 100E-12 F 7 N/R 2 FAILED	1000 PINS 1 AND 11 4	14 14	149 13
777	4 1083 SS	1500 Ohms 100E-12 F 9 N/R 8 FAILED 1250 P	1250 PINS 1 AND 11 4	76 14	149 13
777	4 1083 SS	1500 Ohms 100E-12 F 12 N/R 4 FAILED 1500 P	1500 PINS 1 AND 11 4	76 14	149 13
423	3 1083 SS	0 Ohms 0 F 6 N/R 2 FA1LED 750 P	750 PINS 1 AND 11 4	46 25	252 4

	(Coot'd)	Part ESD Mfr Class	9	Part	.1.						Technology	>	
373				Digital,	, Latch	do.					Bipolar		}
	Test	lest Test Test Test	est	Test		Test		Date	ir Test T	Test	Failure		General
	Source	ce Date Type	az v	Resistance O Ohms		Capacitance	Se Pulses	e Code	2 FAILED	Devices Result Voltage Pin Combination 2 FAILED 2250 PINS 1 AND 11	Criteria	Remarks F	Remarks 4
	<u> </u>		2	5			2				?	1	•
	453	1083 S	SS	o Ohn	Ohms O	u.	20	20 N/R	4 FAILED	2500 PINS 1 AND 11	97	252	4
	453	1083 SS		0 Ohms	0 Str	u.	22	22 N/R	4 FAILED	2750 PINS 1 AND 11	97	252	7
3870		MOS	-	Digital,	Σ	icro Computer	er				SOWN		
	134	N/R G	N S	1500 Ohms		100E-12 F	-	X X	1 FAILED 4 PASSED	1000 PIN(23)(+) APTT(-) 1000 EACH PIN(+) APTT(-,	102	252 252	13 13
	138	N/R G	Š	1500 Ohms		100E-12 F	-	1 N/R	5 FAILED	2000 EACH PIN(+) APTT(-	102	252	13
	139	N/R G	×S	1500 Ohms		100E-12 F	~ -	1 N/R	4 FAILED	3500 EACH PIN(+) APTT(-)	102	252	13
3873		MOS	-	Digital,	, Sic	Digital, Micro Computer	ier				NWOS		
	140	0780 SS		1300 Ohms		100E-12 F	-	N/R	24 FAILED	300 EACH PIN(+) APTT(-)	102	28	13
	140	0780 8	SS	1300 Ohms		100E-12 F	ω	N/R	15 FAILED	300 EACH PIN(+) APTT(-)	102	20	13
	140	0780 SS		1300 Ohms		100E-12 F		N/R	1 FAILED	1000 EACH PIN(+) APTT(-)	102	37	13
398		N/R	~	Linear							BIFET		
	030	N/R N	N/N	1500 Ohms		100E-12 F	-	1 N/R	1 FAILED	2500 N/R	103	252	13
4000		HAR	м	Digital, Gate	, Gat	ø					CMOS		
	050	N/R	N/R	1500 Ohms		100:1-12 F	-	1 N/R	1 FAILED	7119 N/R	102	188	13

	General Remarks 13		N N N N		23		13	22	21		54		2
>	st Ge <u>marks Re</u> 252		252 252 252 252 252		252		252 252	252 252	186		102		252
Technology	Failure Test Criteria Remarks 92 252	CMOS	56 56 56 56	CMOS	59	CMOS	103	25 25	25	CMOS	52	CMOS	56
	Test Voltage Pin Combination 1000 INPUT VCC		1220 VSS(+) INPUT A(-) 1530 VSS(+) INPUT A(-) 1750 VSS(+) INPUT A(-) 1750 VSS(+) INPUT A(-)		250 N/R		1300 N/R 1300 N/R	950 INPUT(+) OUTPUT(-) 1000 INPUT(+) OUTPUT(-)	66 VSS(+) INPUT(-)		900 EACH PIN(+)		580 INPUT B(+) INPUT A(-)
	Number Date Number Test Te Pulses Code Devices Result VG 30 N/R 5 FAILED		3 FAILED 10 FAILED 10 FAILED 2 PASSED		1 FAILED		1 FAILED 1 FAILED	1 FAILED 13 PASSED	15 FAILED		1 FAILED		3 FAILED
	Number Date Pulses Code 30 N/R		N/N		1 N/R		1 N/R	N/R	1 N/R		1 N/R		1 N/R
Part <u>S Description</u> 1 Digital, Gate	Test Test Test Test <u>Date Iype Resistance Capacitance</u> N/R SS 1500 Ohms 117E-12 F	1 Digital, Gate	; 1500 Ohms 150E-12 F	1 Digitał, Gate	; 100 Ohms 218E-12 F	1 Digital, Gate	N/R 1500 Ohms 100E-12 F	1500 Ohms 100E-12 F	5 100 Ohms N/R	1 Digital, Gate	s 1000 Ohms 200E-12 F	1 Digital, Gate	s 1500 Ohms 150E-12 F
Part ESD Mfr Class N/R 1	Test Test Date Type N/R SS	NSC	0478 SS	RCA	N/R SS	N/R	N/R N/	N/R SS	N/R SS	N/R	N/R SS	RCA	SS 8270
(Cont.d) M	Test Source 028	ž	811	~	870	z.	030	577	542	2	384	~	104
Part Number (4001		4001		4001				40014		4001A	

1	General	Remarks	5	2	2	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
7,7	Test Ge	,ks		252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252
Technology CMOS	Failure Te	_	95	56	99	88	88	88	88	88	88	88	88	88	88	51	88	88	88	88
	Test	Voltage Pin Combination		980 INPUT B(+) INPUT A(-)	980 INPUT B(+) INPUT A(-)	750 VDD(14)(+) IN.(1)(-)	775 VDD(14)(+) IN.(1)(-)	790 VDD(14)(+) IN.(1)(-)	795 VDD(14)(+) IN.(1)(-)	800 VDD(14)(+) IN.(1)(-)	805 VDD(14)(+) IN.(1)(-)	810 VDD(14)(+) IN.(1)(-)	815 VDD(14)(+) IN.(1)(-)	825 VDD(14)(+) IN.(1)(-)						
	Date Number Test Te	Result	FAILED	10 FAILED	2 PASSED	1 PASSED	1 PASSED	2 PASSED	1 PASSED	2 FAILED	5 PASSED	1 FAILED	1 FAILED	1 FAILED	1 PASSED	2 FAILED	1 FAILED	1 FAILED	1 PASSED	1 PASSED
	Number Date		1 N/R			200 N/R	200 N/R	200 N/R	200 N/R	1 N/R	500 N/R	300 N/R	10 N/R	80 N/R	200 N/R	1 N/R	1 N/R	1 N/R	200 N/R	200 N/R
Gate	Tost	Capacitance	150E-12 F			100E-12 F														
Part Descripti Digital,	Test Test	Resistance				1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 ОҺтѕ	1500 Ohms									
ESD Class	100	Date Type	SS			Š	Š	8	S	S	3	35	Š	%	3	Š	3	8	3	S
Part ESD Mfr Cla RCA	1	Date	04.78			N/R	N/R	χ Χ	N/R	N R	N/R	χ Ά	X ∕R	X/R	α 2	X R	N/R	N/R	N/R	N/R
(Cont'd) N	Ţ	Source	104			295	567	295	596	297	297	297	297	297	297	297	566	300	301	302
Part Number 4001A																				

ļ		General Remarks	13	13	13	13	13	13	13	13	13	13	13	13	13	£1 £1	13	13	13
λδι		Test G Remarks R		252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252
Technology	CMOS	Failure T		88	88	88	88	88	88	88	88	88	88	88	88	88 88	88	88	88
		Test Test Result Voltage Pin Combination	830 VDD(14)(+) IN.(1)(-)	833 VDD(14)(+) IN.(1)(-)	833 VDD(14)(+) IN.(1)(-)	833 VDD(14)(+) IN.(1)(-)	833 VDD(14)(+) IN.(1)(-)	840 VDD(14)(+) IN.(1)(-)	845 VDD(14)(+) IN.(1)(-)	850 VDD(14)(+) IN.(1)(-)	850 VDD(14)(+) IN.(1)(-)	850 VDD(14)(+) IN.(1)(-)	850 VDD(14)(+) IN.(1)(-)	865 VDD(14)(+) IN.(1)(-)	865 VDD(14)(+) IN.(1)(-)	865 VDD(14)(+) IN.(1)(-) 865 VDD(14)(+) IN.(1)(-)	870 VDD(14)(+) IN.(1)(-)	875 VDD(14)(+) IN.(1)(-)	875 VDO(14)(+) IN.(1)(-)
		_		3 PASSED	5 FAILED	1 FAILED	1 FAILED	1 PASSED	1 PASSED	2 FAILED	3 PASSED	1 FAILED	1 PASSED	6 FAILED	3 PASSED	2 FAILED 8 PASSED	1 FAILED	1 FAILED	1 PASSED
		Number Date Pulses Code	200 N/R	500 N/R	1 N/R	2 N/R	4 N/R	200 N/R	200 N/R	1 N/R	200 N/R	2 N/R	200 N/R	1 N/R	200 N/R	1 N/R	1 N/R	4 N/R	200 N/R
ر	Gate	Test Capacitance	100E-12 F	100E-12 F	100E-12 F	100E-12 F													
	Digital, G	Test Test Test Date Type Resistance	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms													
ESD Class		Test Test Date Type	Z.	S	8	NS	№	85	8	S	S	35	8	Š	NS.	e.	Š	8	N 5
Part E	5		N / N	X/R	N/R	N/R	X X	N/R	X \	X X	N/R	X R	N/R	N/R	N/R	x %	α «	N/R	N/R
(Cont'd)	α,	Test	303	304	304	304	304	305	306	307	307	307	307	308	308	308	309	310	310
. 1	4001A																		

		General	Remarks	13	13	13	13	13	5 5	13	13	13	13	13	13	13	13	13	13	13
ZΕ				252	252	252	252	252	252 252	252	252	252	252	252	252	252	252	252	252	252
Technology	CMOS			88	88	88	88	88	88 88 88	88	88	88	88	88	88	88	88	88	88	88
			nation) IN.(1)(-)	(-)(1)(-)	(-)(1)(-)	(-)(1)(-)	IN.(1)(-)) IN.(1)(-)) IN.(1)(-)	(-)(1)(-)	(-)(1)(-)	(-)(1)(-)) IN.(1)(-)	(-)(1)(-)) IN.(1)(-)) IN.(1)(-)	(-)(1)(-)	(-)(1)(-)) IN.(1)(-)) IN.(1)(-)
		st	Voltage Pin Combination	880 VDD(14)(+) IN.(1)(-)	890 VDD(14)(+) IN.(1)(-)	898 VDD(14)(+) IN.(1)(-)	898 VDD(14)(+) IN.(1)(-)	898 VDD(14)(+) IN.(1)(-)	898 VDD(14)(+) IN.(1)(-) 898 VDD(14)(+) IN.(1)(-)	900 VDD(14)(+) IN.(1)(-)	900 VDD(14)(+) IN.(1)(-)	910 VDD(14)(+) IN.(1)(-)	915 VDD(14)(+) IN.(1)(-)	915 V0D(14)(+) IN.(1)(-)	915 VDD(14)(+) IN.(1)(-)	920 VDD(14)(+) IN.(1)(-)	920 VDD(14)(+) IN.(1)(-)	930 VDD(14)(+) IN.(1)(-)	930 VDD(14)(+) IN.(1)(-)	1250 VDD(14)(+) IN.(1)(-)
		Test	Result	1 FAILED	1 PASSED	7 FAILED	1 FAILED	2 PASSED	6 FAILED 4 PASSED	1 FAILED	1 PASSED	1 PASSED	1 FAILED	1 FAILED	3 PASSED	3 FAILED	1 PASSED	13 FAILED	1 PASSED	1 FAILED
		Number Date Number		25 N/R	200 N/R	1 N/R	2 N/R	200 N/R	1 N/R	1 N/R	200 N/R	200 N/R	3 N/R	10 N/R	200 N/R	1 N/R	200 N/R	1 N/R 1	200 N/R	1 N/R
		Test Numk	Capacitance Pulses	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F 2	100E-12 F	100E-12 F	100E-12 F	100E-12 F 3	100E-12 F							
Part Description	Digital, Gate	Test	Resistance	1500 Ohms 10	1500 Ohms 10	1500 Ohms 10	1500 Ohms 10	1500 Ohms 10	1500 Ohms 10	1500 Ohms 10	1500 Ohms 10	1500 Ohms 10	1500 Ohms 10	1500 Ohms 10	1500 Ohms 10					
ESD	-	Test	Type	S	8	N _S	N S	N _S	S	N	N _S	N S	N O	2 5	N.	S.	N _S	S.	S S	ß
	RCA	Test	Date	N/R	χ Ά	N/R	N/R	X X	N/R	N/R	N/R	'N/R	N/R	N/R	N/R	N/N	N/R	N/R	x /x	N/R
Cont'd) M	l	Test	Source Date	311	312	313	313	313	313	314	314	315	316	316	316	317	317	318	318	326
Part Number (

Part Number (Cont'd) 4001A	(p)	Part ESD Mfr Cla RCA	ESD Class 1	Part <u>Description</u> Digital, Gate	n ate				Technology CMOS	Д.	ı
	fest Source 330	Test ce Date N/R	t Test e <u>Type</u> GN	Test Test Test Test Source Date Type Resistance 330 N/R GN 1500 Ohms	Test <u>Capacitance</u> 100E-12 F	Number Date Number Pulses Code Devices 5 N/R	Test Result FAILED	Test Voltage Pin Combination 1500 VDD(14)(+) IN.(1)(-)	Failure T Criteria R 88	Test Ge Remarks Re 252	General Remarks 13
	330	N/R	S.	1500 Ohms	100E-12 F	200 N/R	1 PASSED	1500 VDD(14)(+) IN.(1)(-)	88	252	13
	346	N/N	N	1500 Ohms	100E-12 F	1 N/R	2 FAILED	2000 VDD(14)(+) IN.(1)(-)	88	252	13
	308	N/R	<u>8</u>	1500 Ohms	100E-12 F	500 N/R	1 PASSED	865 VDD(14)(+) IN.(1)(-)	88	252	13
4001 A		N/R	-	Digital, Gate	ate				SOWO		
	143	X/R	SS	100 Ohms	250E-12 F	1 N/R	1 FAILED 1 FAILED	300 N/R 400 N/R	102 102	185	13
	177	N/R	SS	250 Ohms	250E-12 f	1 N/R	1 FAILED 1 FAILED	300 N/R 600 N/R	102 102	185 185	£1 £1
	145	X/R	SS	500 Ohms	250E-12 F	1 N/R	1 FAILED 1 FAILED	400 N/R 800 N/R	102	185 185	5 5
	146	N/R	SS	1000 Ohm	250E-12 F	N/R	1 FAILED 1 FAILED	600 N/R 1000 N/R	102 102	185 185	13
	147	N/R	SS	2000 Ohm:	250E-12 F	1 N/R	1 FAILED	1200 N/R	102	185	13
	148	N/R	SS	3000 Ohms	250E-12 F	N. R.	1 FAILED 1 FAILED	2000 N/R 2500 N/R	102	185	5 5
	149	N/R	SS	5000 Ohm 3	250E-12 F	1 N/R	1 FAILED 1 FAILED	3000 N/R 4000 N/R	102 102	185	13 13
	150	N/R	SS	500 Ohnis	N/R	1 N/R	1 FAILED 1 FAILED	2000 N/R 2500 N/R	102 102	185	13

	1	General	Kemarks 13	. E	13	13	13	13	13	13	13	13			5	٠ ک	٠ ک	٠		~	2	2	<u>~</u>		13
<u>}</u>		-	Kemarks K	185	185	185	185	185	185	185	185	185			252	252	252	252		252	252	252	252		252
Technology	CMOS	Failure Test	Uriteria Ke	102	102	102	102	102	102	102	102	102		CMOS	99	26	26	9¢	SOWO	95	95	95	26	CMOS	103
		Test	1750 N/R	2000 N/R	1000 N/R	1500 N/R	700 N/R	950 N/R	600 N/R	700 N/R	300 N/R	400 N/R			VSS(+)	1570 VSS(+) INPUT A(-)	VSS(+)	1850 VSS(+) INPUT A(-)		INPUT	INPUT B(+)	INPUT B(+) INPUT	4050 INPUT B(+) INPUT A(-)		1300 N/R
		4	FAILED	1 FAILED	1 FAILED	1 FAILED	1 FAILED	1 FAILED	1 FAILED	1 FAILED	1 FAILED	1 FAILED	٠		3 FAILED	10 FAILED	10 FAILED	2 PASSED		3 AILED	10 FAILED		Z PASSED		1 FAILED
			1 N/R 1		1 N/R		1 N/R		1 N/R		1 N/R				1 N/R					1 N/R					1 N/R
Part Description	Digital, Gate	Test	N/R		500 Ohms N/R		500 Ohms 100E-12 F		500 Ohms 250E-12 F		500 Oh 15 500E-12 F			Digita,, Gate	1500 Ohms 150E-12 F				Digital, Gate	1500 Ohms 150E-12 F				Digital, Gate	1500 Ohms 100E-12 F
ESD	-	Test	SS		N/R SS		N/R SS		N/R SS		N/R SS			-	0478 SS				-	. ss 8270				-	N/R N/R
Part (Cont'd) Mfr	N/R	Test Test	151 K		152 N		153 N		154 N		155 N			JSN	119 0				RCA	105 04				N/R	030 N/
	4001A													40018					40018					40018	

Part	(Conf.d)	Part ESD Mfr Class	Part S Descript	o				Technology		
1001B				Gate				CMOS		
			Toot Toot	Toct	Number Date Number Test		fest	Failure Test		Generau
	1631	יבאר יב מיבה מים	Type Pesistance		Pulses Code De	ب	Voltage Pin Combination	Criteria Ren	Remarks Ren	Remarks
	030	X /8	N/R 1500 Ohms				1300 N/R	103	252	13
4002B		N/R	1 Digital,	Gate				SOWO		
	930	N/R N/R		1500 Ohms 100E-12 F	1 N/R	1 FAILED 1 FAILED	1000 N/R 1000 N/R	103	252	£1
9007		MOT	2 Digital,	Register, Shift	ىپ			CMOS		
	050	Z/R	N/R 1500 Ohms	100E-12 F	N/N	1 FAILED	4951 N/R	102	188	13
	927	1186 SS	1500 Ohms	ns 100E-12 F	17 N/R	3 FAILED	3500 OUTPUT TO GND	S	252	٧.
49007		NSC	1 Digital,	, Register, Shift	±-			CMOS		
	9£7	1186 SS	s 1500 Ohms	ns 100E-12 F	14 8552	1 FAILED	2000 INPUT TO OUTPUT	5	252	8
	736	1186 SS	s 1500 Ohms	ns 100E-12 F	11 8552	1 FAILED	1400 INPUT TO OUTPUT	70	252	2
	9£7	1186 SS	s 1500 Ohms	ns 100E-12 F	7 8552	1 FAILED	800 INPUT TO GND	\$	252	M
89007		8/2	1 Digital,	, Register, Shift	ĵ.			CMOS		
	030	N/R	/R 1500 Ohi	N/R 1500 Ohms 100E-12 F	1 N/N	1 FAILED 1 FAILED	1000 N/R 1000 N/R	103	252	£1
89)07		RCA	2 Digital	, Register, Shift	ţ			SOWO		
	436	1186 SS	.S 1500 Ohms	ms 100E-12 F	16 N/R	1 FAILED	3000 INPUT TO OUTPUT	\$	252	m

Part Number		Part E	ESD	Part Descripti	tion		ı			Technology	À	
2005		a/N	-	Digital,		Inverter, Buffer				CMOS		1
	Test	Test	t Test	Test Test			Date	Test				General
	030	030 N/R	2 X	N/R 1500 Ohms		Labacitance Pu 100E-12 F	Pulses Code Devi	Devices Result Vo	Voltage Pin Combination 1000 N/R	Criteria Re 103	Remarks Re 252	Remarks 13
40078		N/8	-	Digital,		Inverter, Buffer				CMOS		
	030	N N	α ×	N/R N/R 1500 Ohms		100E-12 F	ν/ν Σ	1 FAILED 1 FAILED	1000 N/R 1000 N/R	103	252	13
40088		۸ ا	-	Digital,		Arithmetic, Adder, Full	r, Full			CMOS		
	030	α/ν α/ν	Z Z	N/R 1500 Ohms		100E - 12 F	1 N/R	1 FAILED 1 FAILED	1000 N/R 1000 N/R	103	252 252	£ £
401018		N/R	-	Digital,	_	Arithmetic, Pariu	Parity Gen. & Check	. ¥		CMOS		
	030	N/R	N/R	1500 Ohms		100E-12 F	1 N/R	1 FAILED 1 FAILED	1000 N/R 1000 N/R	103	252	5 5
4011		MOT	-	Digital,	, Gate					SOWO		
	14	0575 ss	SS	560 Ohms		100E-12 F	1 X/R	1 FAILED 1 FAILED 1 FAILED 1 FAILED 1 FAILED 1 FAILED 1 FAILED 1 FAILED	1000 VDD(+) INPUT(-) 4000 INPUT(+) VDD(-) 1000 VSS(+) INPUT(-) 2000 INPUT(+) VSS(-) 500 OUTPUT(+) INPUT(-) 5000 VDD(+) OUTPUT(-) 5000 OUTPUT(+) VDD(-) 4500 VSS(+) OUTPUT(-)	102 102 102 102 102 102 102 102	252 252 252 252 252 252 252 252 252 252	<u> </u>

Part		Part ESD	Part							
Number	(Contid)	Mfr Class		c				Technology	λBc	
4011		MOT	1 Digital, Gate	ate				CMOS		
	Test		Test Test	Test	Number Date Number	Test	Test	Failure	Test	General
	Sour	ce Date Ty	pe Resistance	Capacitance	Pulses Code Devices	Result	Voltage Pin Combination	Criteria	Remarks	Remarks
	141	0575 SS	141 0575 SS 560 0hms	100E-12 F	N/8	FAILED	(-)SS(-)	102	252	13
						1 FAILED	5000 VSS(+) VDD(-)	102	252	13
4011		RCA	1 Digital, Gate	ate				CMOS		
	171	0575 SS	560 Ohms	100E-12 F	1 N/R	1 FAILED	3500 VDD(+) INPU;(-)	102	252	13
						1 FAILED	5000 INPUT(+) VDD(-)	102	252	13
						1 FAILED	2500 VS;(+) INPUT(-)	102	252	13
						1 FAILED	3000 INPUT(+) VSS(-)	102	252	13
						1 FAILED	3000 INPUT(+) OUTPUT(-)	102	252	13
						1 FAILED	1000 OUTPUI(+) INPUI(-)	102	252	13
						1 FAILED	1500 VDD(+) OUTPUT(-)	102	252	13
						1 FAILED	2500 OUTPUT(+) VBB(-)	102	252	13
						1 FAILED	2000 VSS(+) OUTPUT(-)	102	252	13
						1 FAILED	2000 OUTPUT(+) VSS(-)	102	252	13
						1 FAILED	2000 VDO(+) VSS(-)	102	252	13
						1 FAILED	5000 VSS(+) VDD(-)	102	252	13
4011		NSC	1 Digital, Gate	ate				SOWO		
	171	0575 SS	. 560 Ohms	130E-12 F	1 N/F	1 FAILED	500 VDD(+) !NPUT(-)	102	252	13
						1 FAILED	5000 INPUT(+) VDD(-)	102	252	13
						1 FAILED	500 VSS(+) INPUT(-)	102	252	13
						1 FAILED	2500 INPUT(+) VSS(-)	102	252	13
						1 FAILED	2500 INPUT(+) OLITPUT(-)	102	252	13
						1 FAILED	500 OUTPUT(+) INPUT(-)	102	252	13
						1 FAILED	3000 VDD(·) OUTPUT(-)	102	252	13
						1 FAILED	1500 OUTPUT(+) VDD(-)	102	252	13
						1 FAILED	5000 VSS(+) OUTPUT(-)	102	252	13
						1 FAILED	2000 OUTPUT(+) VSS(-)	102	252	13
						1 FAILED	1000 VDD(+) VSS(-)	102	252	13

	1		So	Part						-	į	
4011	6	티왕	1	Digital, Gal	prion Il, Gate	te				CMOS	Á	
				•		:						
	Test	Test	Test	Test Test Test		Test N	Number Date Number	Test	Test			General
	Sour	ce Date	Type	Resist		Capacitance F	Pulses Code Dev	Devices Result V	Voltage Pin Combination	Criteria	Remarks	Remarks
	141	141 0575 SS 560 Ohms	SS	260 0			× ×	FAILED	5000 VSS(+) VDD(-)			13
4011		N/R	-	Digital,	ıl, Gate	te				CMOS		
	030	N/R	N/R	1500 Ohms		100E-12 F	1 N/R	1 FAILED	1300 N/R	103	252	13
								1 FAILED	1300 N/R	103	252	13
	142	0575 SS	SS	260 0	Ohms .	100E-12 F	1 N/R	1 FAILED	500 VDD(+) INPUT(-)	102	252	13
								1 FAILED	1000 INPUT(+) VDD(-)	102	252	13
								1 FAILED	1000 VSS(+) INPUT(-)	102	252	13
								1 FAILED	1000 INPUT(+) VSS(-)	102	252	13
								1 FAILED	1000 INPUT(+) OUTPUT(-)	102	252	13
								1 FAILED	1000 OUTPUT(+) INPUT(-)	102	252	13
								1 FAILED	4000 VDD(+) OUTPUT(-)	102	252	13
								1 FAILED	4500 OUTPUT(+) VDD(-)	102	252	13
								1 FAILED	5000 VSS(+) OUTPUT(-)	102	252	13
								1 FAILED	2000 OUTPUT(+) VSS(-)	102	252	13
								1 FAILED	4000 VDD(+) VSS(-)	102	252	13
								1 FAILED	5000 VSS(+) VDD(-)	102	252	13
	384	N/R	SS	1000 Ohms		200E-12 F	1 N/R	1 FAILED	500 EACH PIN(+)	52	103	54
								1 FAILED	500 EACH PIN(+)	52	140	54
								1 FAILED	800 EACH PIN(+)	52	130	57
								1 FAILED	2300 EACH PIN(+)	52	126	57
								1 FAILED	2900 EACH PIN(+)	52	134	57
								1 FAILED	500 EACH PIN(+)	52	119	57
4011		SSS	2	Digital	ıl, Gate	te				CMOS		
	003	1175	SS	0	Ohms	100E-12 F	1 N/R	1 FAILED	600 INPUT(+) PR. SUPPLY(-)	102	252	13
	700	1175 SS	SS	0	Ohms	125E-12 F	1 N/R	1 FAILED	4000 INPUT	102	232	13

Part Number		Part ESD Mfr Cla	ESD Class	Part Description	_				Technology	À	
4011A			~	Digital,	Gate				CMOS		
	Test	Test	Test Test Test	: Test	Test	Number Date Number		Test			General
	Source 163	ce Date	e Type SS	N/R SS 610 Ohms	Capacitance 100E-12 F	Pulses Code Devices		Result Voltage Pin Combination PASSED 4000 VSS(7)(+)	Criteria R	Remarks 252	Remarks 2
							1 FAILED	2500 VSS(7)(-)	25	160	2
							1 FAILED	2000 INPUT(1)(+)	25	159	2
							1 FAILED	4000 INPUT(1)(-)	57	159	2
							1 FAILED	4000 OUTPUT(4)(+)	22	252	2
							1 FAILED	3500 OUTPUT(4)(-)	57	252	2
							1 FAILED	1500 VDD(14)(+)	22	252	2
							1 PASSED	4000 VDD(14)(-)	25	252	5
40118		N/R	-	Digital, Ga	Gate				CMOS		
	030	N/R		N/R 1500 Ohms	100E-12 F	1 N/R	1 FAILED	1300 N/R	103	252	13
							1 FAILED	1300 N/R	103	252	13
4)12		INS	~	Digital, Ga	Gate				CMOS		
	029	N/R	N/R	1500 Ohms 100E-12	100E-12 F	1 N/R	1 FAILED	2428 N/R	102	189	13
40128		N/R	-	Digital, Ga	Gate				CMOS		
	030	N/R		N/R 1500 Ohms 100E-12	100E-12 F	1 N/R	1 FAILED 1 FAILED	1000 N/R 1000 N/R	103	252 252	13 13
4013		FSC	-	Digital, Fl	flip-flop				CMOS		
	124		0478 SS	1500 Ohms 150E-12 F	150E-12 F	1 N/R	3 FAILED	1240 VDD(+) SET(-)	95	252	2
							10 FAILED	1570 VDD(+) SET(-)	99	252	2
							10 FAILED 2 PASSED	1830 VDD(+) SET(-) 1830 VDD(+) SET(-)	92 28 28	252	rv v
							1			į	

3		st General	marks Remarks		252 3	252 3		252 5	252 5	252 5	252 2					25.2	252 2	285 13	285 13	252 13		
Tochool	SOMO	Failure Test		CMOS	5	ſΛ	CMOS	56 57	56	26	25	57	25	57	57	75	57	9	34	102	SOWO	
		Test	Voltage Pin Combination 400 N/R		1800 OUTPUT TO GND	1600 OUTPUT TO GND		710 RESET(+) CLOCK(-)	1000 RESET(+) CLOCK(-)	1000 RESET(+) CLOCK(-)	3500 OUTPUT(1)(+)	3000 OUTPUT(1)(+)	3500 INPUT(5)(+)	2500 INPUT(5)(-)	4000 VSS(7)(+)	2500 VANC1626+3	4000 VDD(14)(-)	373 INPUT(5)(+) VSS(7)(-)	205 VDD(14)(+) INPUT(3)(-)	3500 11(INPUT) 7(VSS)		
		lest	Devices Result V		1 FAILED	1 FAILED		3 FAILED	10 FAILED	2 PASSED	1 FAILED	1 FAILED	1 FAILED	1 FAILED	1 PASSED	1 FAILED	1 PASSED	4 FAILED	4 FAILED	2 FAILED		
		Number Date Number	Pulses Code		13 N/R	12 N/R		1 N/R			1 N/R							1 N/R	1 N/R	1 N/R		
S	Flip-Flop	Test	e Capacitance 100E-12 F	flip-Flop	1500 Ohms 100E-12 F	100E-12 F	Flip-Flop	150E-12 F			100E-12 F							200E-12 F	200E-12 F	100E-12 F	Flip-Flop	
Part Description	Digital,	Test	Resistance 1500 Ohms	Digital,	1500 Ohms	1500 Ohms	Digital,	1500 Ohms			610 Ohms							100 Ohms	100 Ohms	1500 Ohms	Digital,	
Part ESD Mfr Class		Test Test Test	Source Date Type Resistance 165 0676 GN 1500 Ohms	RCA 1	1186 SS	1186 SS	RCA 2	0478 SS			N/R SS							0178 SS	0281 SS	1284 SS	NSC 1	
(Cont.d)	f	Test	Sourc 165		736	927		106			164							970	920	393		
Part	1			4013			4013A														40138	

Part Mfr NSC	ESD Class 1	ta Li	ip-Flop		}		Technology CMOS	
Test Test Test Test Test Source Date Type Resistance Capacita 120 0478 SS 1500 Ohms 150E-12	Test Resistance 1500 Ohms		F F	Number Date Number Pulses Code Devices 1 N/R 10 10 2	Test Result FAILED FAILED PASSED	Voltage Pin Combination 1350 DATA(+) CLOCK(-) 1620 DATA(+) CLOCK(-) 1620 DATA(+) CLOCK(-)	Failure Test Criteria Rema 56 56 56	Test General <u>Remarks Remarks</u> 252 5 252 5 252 5 252 5
RCA 1 Digital, Flip-Flop		i ip-Flo	ō.				CMOS	
0478 SS 1500 Ohms 150E-12	SE	150e - 12	<u></u>	1 N/R	3 FAILED 10 FAILED 10 FAILED 2 PASSED	860 SET(+) DATA(-) 2200 SET(+) DATA(-) 4000 SET(+) DATA(-) 4000 SET(+) DATA(-)	56 56 56 56	252 252 252 252 252
0488 SS 1500 Ohms 100E-12		100E-12	ıL	14 N/R	5 FAILED	2000 COMMON TO OUTPUT	5	252
0488 SS 1500 Ohms 100E-12		100E-12	Ľ.	12 N/R	5 FAILED	1500 COMMON TO OUTPUT	5	252
1186 SS 1500 Ohms 100E-12		100E-12	u_	12 N/R	1 FAILED	1600 OUTPUT TO GND	\$	252
1186 SS 1500 Ohms 100E-12 F	100E-12			13 N/R	1 FAILED	1800 GND TO OUTPUT	5	252
1186 SS 1500 Ohms 100E-12	100E-12		ıL	14 N/R	5 FAILED	2000 INPUT AND OUTPUT	70	252
N/R 1 Digital, Flip-Flop		lip-flop					CMOS	
N/R N/R 1500 Ohms 100E-12 F	1500 Ohms 100E-12			1 N/R	1 FAILED 1 FAILED	1000 N/R 1000 N/R	103	252 252
N/R 1 Digital, Register, S	, Register,	egister, S	Shift				CMOS	
N/R N/R 1500 Ohms 100E-12	ms 100E-12		u_	1 N/R	1 FAILED	1000 N/R	103	252
MOT 2 Digital, Register, Shift		egister,	Shift				SOMO	
1086 SS 1500 Ohms 100E-12	100E-12		u.	1 N/R	5 FAILED	2750 EACH PIN TO 8 & 16 (+ -)	19	252

Part Number 40158		Part ESD Mfr Cla	ESD Class 1	Part Descripti Digital,	on Register, Shift				<u>Technology</u> CMOS	7.	}
	Test Source 030	히	Test Test Date Type N/R N/R	Test Resistance 1500 Ohms	Test Number Date Capacitance Pulses Code 100E-12 F 1 N/R	Number Date Number Test Pulses Code Devices Resul 1 N/R 1 FAllE	#18	Test Voltage Pin Combination 1000 N/R	Failure Test Criteria Remar	\$ 5	General Remarks
							FAILED	1000 N/R	103	252	<u>ភ</u>
40158		RCA	7	Digital,	Register, Shift				CMOS		
	736		0788 SS	1500 Ohms 10	100E-12 F 18	18 N/R 10	10 FAILED 10 FAILED	4000 COMMON TO OUTPUT 4000 INPUT TO COMMON	יס יס	252	мм
401608		N/R	-	Digital, Coun	Counter/Divider				CMOS		
	030	N/R	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED 1 FAILED	1000 N/R 1000 N/R	103	252	13
401618		N/R	-	Digital, Coun	Counter/Divider				CMOS		
	030		N N	N/R N/R 1500 Ohms 100	100E-12 F 1	1 N/R 1	1 FAILED	1000 N/R	103	252	13
40161BC		N/R	-	Digital, Count	Counter/Divider				CMOS		
	030	N/R	N/R	1500 Ohms	100E-12 F 1	1 N/R 1	1 FAILED	1000 N/R	103	252	13
401628		N/R	-	Digital, Count	Counter/Divider				CMOS		
	030		N/R	N/R N/R 1500 Ohms 100	100E-12 F 1	1 N/R 1	1 FAILED 1 FAILED	1000 N/R 1000 N/R	103	252	13
401638		N/R	←	Digital, Count	Counter/Divider				CMOS		
	030	N/R		N/R 1500 Ohms 100	100E-12 F 1	1 N/R 1	1 FAILED	1000 N/R	103	252	13

Part Number (Cont'd) 401638	Part ESO Mfr Cla	ESO Class	Part <u>Description</u> Digital, Counter/Divider				Technology		1
Sour 030	Test Test Source Date 030 N/R	t Test e Type N/R	Test Test Resistance Capacitance 1500 Ohms 100E-12 F	Number Date Number Test Pulses Code Devices Resul	비유	Voltage Pin Combination 1000 N/R	Failune Test Criteria Remai	rks 252	General Remarks 13
	RCA	-	Linear, Switch				CMOS		
393	3 0884	SS 7	1500 Ohms 100E-12 F	1 N/R	1 FAILED	1000 N/R	102	252	13
401748	N/R	1	Digital, Flip-Flop				CMOS		
030	0 N/R	N/R	1500 Ohms 100E-12 F	1 N/R	1 FAILED 1 FAILED	1000 N/R 1000 N/R	103	252 252	13
	RCA	-	Digital, Counter/Divider				CMOS		
393		1284 SS	1500 Ohms 100E-12 F	1 N/R	2 FAILED	750 13(INPUT) 16(VDD)	102	252	13
	2	-	Digital, Counter/Divider				CMOS		
030	0 N/N	X X	1500 Uhms 100E-12 F	1 N/R	1 FAILED 1 FAILEO	1000 N/R 1000 N/R	103	252	55
	FSC	-	Digital, Counter/Divider				CMOS		
200	17 N/R	S.	1500 Uhms 100E-12 F	1 N/R	2 PASSED	400 N/R	82	252	13
008	18 N/R	ND ~	1500 Jhms 100E-12 F	1 N/R	2 PASSED	600 N/R	82	252	13
600	90 N/R	ND ~	1500 Jhms 100E-12 F	1 N/R	2 PASSED	800 N/R	82	252	13
010	10 N/R	NS ~	1500 Jhms 100E-12 F	1 N/R	2 PASSED	1000 N/R	82	252	13

	General Remarks 13		14	13 13	13	13	13	£ £		13	13	13		13	13
λδι	Test G Remarks R 252		146	167 167	252	252	252	252 252		167	252	252		252	252
Technology CF.0S	Failure 1 Criteria R 102	CMOS	57	81	82	32	82	82 82	CMOS	81	83	83	SOWO	83	83
	Voltage Pin Combination 2500 N/R		400 N/R	2000 IMPUT(3)(+) OUT(12)(-) 2500 IMPUT(5)(+) OUT(11)(-)	400 N/R	600 N/R	800 N/R	1000 N/R 1000 N/R		2000 INPUT(3)(+) OUT(12)(-)	400 N/R	600 N/R		200 N/R	400 N/R
	Test Result FAILED		2 PASSED	1 FAILED 4 FAILED	2 PASSED	2 PASSED	2 PASSED	1 PASSED 1 FAILED		4 FAILED	5 PASSED	5 PASSED		5 PASSED	5 PASSED
6.	Number Date Pulses Code 1 N/R		1 N/R	1 N/R	1 N/R	1 N/R	1 N/R	1 N/R		1 N/R	1 N/R	1 N/R		1 N/R	1 N/R
on Counter/Divider	Test Test Resistance Capacitance 1500 Ohms 100E-12 F	Gate	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	Gate	100E-12 F	100E-12 F	100E-12 F	Gate	100E-12 F	100E-12 F
Par: <u>Description</u> Digital, Co	Test <u>Resistance</u> 1500 Ohms	Digital, (1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	Digital, G	1500 Ohms	1500 Ohms	1500 Ohms	Digital, G	1500 Ohms	1500 Ohms
Part ESD Mfr Class NSC 2	Test Test Test Test Source Date Type Resis 393 0784 SS 1500	FSC 1	0676 GN	0878 SS	N/R GN	N/R GN	N/R GN	N/R GN	NSC 1	0878 ss	0878 GN	0878 GN	SSS 1	0878 GN	0878 GN
(Cont.d)	Test Sourc 393		165	900	200	800	600	010		900	012	013		011	012
Part Number 4018		4019							4019				4019		

Part Number (Co 4019	(Cont'd)	Part ESD Mfr Class SSS 1	Part Descript Digital,	ion Gate				Technology	>	1
	Test	Test Test Test Test Source <u>Date Type</u> Resis	it Test e Resistand	Test lest Nu Resistance Capacitance Pu	Number Date Number Test Pulses Code Devices <u>Resu</u>	<u> </u>	Test Voltage Pin Combination	Failure Te <u>Crite</u> ria Re	Test Ger Remarks Re	General Remarks
	013	0878	1500 Ohms	100E-12 F	N/R	FAILED	600 N/R	83	252	13
401948		N/R	Digital,	Register, Shift				CMOS		
	030	N/R N/R	1500 Ohms	; 100E-12 F	1 N/R	1 FAILED 1 FAILED	1000 N/R 1000 N/R	103 103	252 252	13 13
401958		N/R	Digital,	Register, Shift				CMOS		
	030	N/R N/R	1500 Ohms	; 100E-12 F	1 N/R	1 FAILED 1 FAILED	1000 N/R 1000 N/R	103	252 252	र्घ र
4019A		, JSN	Digital,	Gate				CMOS		
	393	0180 SS	1500 Ohms	; 100E-12 F	1 N/R	1 FAILED	1200 N/R	102	252	13
40198		RCA	Digital,	Gate				CMOS		
	030	N/R N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1000 pin 4 (input) to VDD	103	157	13
	436	SS 8890	1500 Ohms	100E-12 F	18 N/R	5 FAILED	4000 - OUTPUT TO + VSS (GROUND)	5	252	М
40198		N/R	Digital,	Gate				SOWO		
	030	N/R N/R		1500 Ohms 100E-12 F	7 N/R	1 FAILED	1000 N/R	103	252	13
7020		SSS	2 Digital,	Counter/Divider				CMOS		
	003	1175 SS	0 Ohms	3 100E-12 F	1 N/R	1 FAILED	900 INPUT(+) PR. SUPPLY(-)	102	252	13

Part Number			S	Part Description	c				yooloadoot	Ş	
40208		 		ſ	Counter/Divider				CMOS	Ž.	
	Test Source		Test Test Test Date Type Resis	Test Resistance	Fest Capacitance	Number Date Number Pulses Code Devices	Test	Test Voltade Din Combination	Failure I		General
	030	N/R	N/R	1500 Ohms	100E-12 F	N/R	FAILED	1000 N/R		252	13
							1 FAILED	1000 N/R	103	252	13
4020B		RCA	2	Digital, C	Counter/Divider	Ĺ			SOMO		
	436	1186	SS	1500 Ohms	100E-12 F	18 N/R	1 PASSED	4000 N/R	5	252	33
	736	1186 SS		1500 Ohms	100E-12 F	16 N/R	1 FAILED	3000 INPUT TO OUTPUT	5	252	M
							1 FAILED	3000 INPUT TO GND	IO L	252	м
							1 FAILED	INPUT	n v	252	n m
4021		NSC	-	Digital, Re	Register, Shift	.			CMOS		
	900	0878 ss		1500 Ohms	100E-12 F	1 N/R	3 FAILED	2000 INPUT(13)(+) OUT(12)	81	167	13
							1 FAILED	800 INPUT(11)(+) OUT(12)	81	167	13
4021A	•	RCA	- -	Digital, Re	Register, Shift	L			CMOS		
	156	N/R	ss 6	610 Ohms	100E-12 F	1 N/R	2 PASSED	1500 OUTPUT(3)(+)	57	252	2
								1500 OUTPUT(3)(-)	25	252	2
								1500 OUTPUT(3)(-)	25	252	2
									25	252	7
									25	252	7
							2 PASSED		25	252	2
								1500 P17(15)(-)	25	159	2
								1500 vDD(16)(+)	25	159	2
								1500 vpo(16)(+)	25	252	2
							2 PASSED	1500 VOD(16)(-)	25	252	2
	157	×/R	9 NS	610 Ohms	100E-12 F	1 N/R	6 PASSED	1000 VSS(8)(-)	25	164	2

Technology	CMOS	Test	Criteria Remarks Remarks	57 252 2	57 164 2	57 252 2	57 164 2	57 252 2	164	57 164 2	57 252 2	57 164 2	252	57 164 2		252	:	187	181		187	187	e wat A	1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1000 · 1	• 55		28. 28.	158	57 158 2	57 158 2	CMOS	102 252 13
			Voltage Pin Combination Cri	1200 OUTPUT(3)(-)	1200 OUTPUT(3)(-)	1200 OUTPUT(3)(-)	1500 VSS(8)(-)	1500 PSC(9)(-)	1500 PI7(15)(-)	1500 VDD(16)(+)	1500 OUTPUT(3)(-)	1500 OUTPUT(3)(-)	1500 OUTPUT(3)(-)	1500 PI7(15)(-)	1500 VSS(8)(-)	1500 VSS(8)(-)			3250 VDD(163(+)	3250 OUTPUT(5)(+)	2104_OUTPUT(3)(-)	3255 VSS(8)(+)	2063 VSS(8)(+)	3250 PS. (9)(+)	4000 030(9)(-)	(+)(5)21:0025	4000 PI7('5)(')	1000 VSS(B)(-)	1000 PSC(9)(·)	1000 PI7(15)(·)	5	800 N/R
		Number Test	Devices Result	R 1 PASSED	2 PASSED	1 FAILED	R 2 PASSED	2 PASSED	1 PASSED	4 PASSED	2 PASSED	2 PASSED	1 FAILED	4 PASSED	3 PASSED	1 FAILED		9	2 FAILED	2 FAILED	14 FAILED	2 FAILED	12 FAILED	2 FAILED	2 FAILED	2 PASSED	5 FAILED		2 PASSED	1 PASSED		R 1 FAILED
	Register, Shift		ce Pulses	100E-12 F 1 N/R			100E-12 F 1 N/R											100E-12 F 1 N/R										100E-12 F 1 N/R			Register, Shift	100E-12 F 1 N/R
Part Ss Description	Digital,		au	GN 610 Ohms			610 Ohms											610 Ohms										SS 610 Ohms			1 Digital, Reg	1500 Ohms
Part ESD (Contid) Mfr Class	RCA	Test Test Te	Source Date I	N/R			159 N/R GN											160 N/R SS										233 N/R SS			NSC	393 0180 SS
Part Number (Co	1																														4021A	

Part	Part	ESD	Part Description	ç				Technology	>	
40218	FSC		Digital,	Register, Shift	ift			CMOS		1
	Test Te	Test Test Test	t Test	řest	Number	Test	Test			General
	Source Date Type	te Iva	e Resistance		Pulses Code Devices	Result	Voltage Pin Combination	Criteria Re		Remarks
	161 N/R	R SS	610 Ohms	100E-12 F	1 N/R	2 PASSED	4000 VSS(+)	25	252	2
						3 PASSED	4000 VSS(-)	25	162	7
						1 FAILED	4000 VSS(-)	25	160	5
						1 FAILED	2000 VSS(-)	25	252	2
						1 FAILED	4000 PSC(+)	22	161	2
						1 FAILED	2500 PSC(+)	57	159	2
						1 FAILED	3500 PSC(-)	25	159	2
						1 FAILED	2000 PSC(-)	25	252	2
						2 FAILED	4000 VDD(+)	25	252	2
						2 PASSED	4000 VDD(-)	25	252	2
						1 FAILED	2000 P17(+)	25	252	2
						1 FAILED	2000 PI7(+)	25	159	2
						2 FAILED	2500 P17(-)	25	252	2
						1 FAILED	2500 OUTPUT(+)	25	252	2
						1 PASSED	4000 GUTPUT(+)	57	252	2
						5 PASSED	4000 OUTPUT(-)	25	252	2
40218	N/R	-	Digital, R	Register, Shift	ift			CMOS		
	030 N/R	R N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13
						1 FAILED	1000 N/R	103	252	13
4023A	N/R	-	Digital, (., Gate				CMOS		
	244 N/R	R SS	1500 Chms 100E-12	100E-12 F	1 7614	1 FAILED	975 OUTPUT(+) INPUT(-)	27	252	22
						1 FAILED	1000 OUTPUT(+) INPUT(-)	27	252	22
						12 PASSED	1000 OUTPUT(+) INPUT(-)	27	252	22
	245 N/R	R SS	100 Ohms	N/R	1 7614	15 FAILED	203 VSS(+) INPUT(-)	27	186	21
40238	N/R	-	Digital, C	Gate				CMOS		
	030 N./	R N/R	N/R N/R 1500 Ohms 100E-12	100E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13

Technology	Failure Tect General	Remarks	252	47 186 21	CMOS	47 252 22	252	77 725 75	47 186 21	CMOS) 102 252 13	CMOS	103 252 13 103 252 13	CMOS	CMOS 5 252 3
		voltage Pin Combination		232 VSE(+) INPUT(-)		1000 VSS(+) INPUT(-) 1000 VSS(+) INPUT(-)	950 OUTPUT(+) INPUT(-)	1000 OUTPUT(+) INPUT(-)	61 VSS(+) INPUT(-)		400 INPUT(+) PR. SUPPLY(-)		1000 N/R 1000 N/R		4000 N/R
	Mumber Date Bumber Test	Code Devices Result	N/R 1 FAILED	N/R 15 FAILED		1 N/R 3 FAILED	_	1 AILED 12 PASSED	1 N/R 15 FAILED		7508 1 FAILED		1 N/R 1 FAILED 1 FAILED		18 N/R 5 PASSED
Part Description Digital, Gate	+30 <u>1</u>	rest stance Capacitance	1500 Ohms 100E-12 F	100 Ohms N/R	Digital, Gate	1500 Ohms 100E-12 F			100 Ohms N/R	Digital, Counter/Divider	0 Ohms 100E-12 F 1	Digital, Counter/Divider	N/R 1500 Ohms 100E-12 F	Digital, Counter/Divider	Digital, Counter/Divider 1500 Ohms 100E-12 F
Part ESD Mfr Class N/R	1001 1001 1004		j	S N/R SS	N/R	4 N/R SS			5 N/R SS	SSS 1	3 1175 SS	N/R	Z/R	RCA 2	RCA 1186 SS
Part Number (Cont'd) 40238		10S	030	572	40230	577			572	7707	003	87207	030	40248	436

1990		2 L R	ESD	Part Description Digital, C	on Gate				Technology CMOS	17	l
	1044	1501 1	Test Test Test	Test	Test	Date	Test				General
	030	21	2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	N/R N/R 1500 Ohms	Lapacitance 100E-12 F	1 N/R 1	FAILED	Voltage Pin Combination 1000 N/R	Criteria Re		Remarks 13
							1 FAILED	1000 N/R	103	252	13
40278		8/N	(1	Digital, F	flip-Flop				CMOS		
	030	Z/Z	× ×	1500 Ohms	100E-12 F	1 N/R	1 FAILED 1 FAILED	2100 N/R 2100 N/R	103	252 252	13
- 0278		RCA	~	Digital, F	flip-flop				SOMO		
	736		0488 SS	1500 Ohms	100E-12 F	16 N/R	5 FAILED	3000 OUTPUT TO GROUND	5	252	٣
4028A		S	~	Digital,	Decoder				SOWO		
	393	0385	SS	1500 Ohms	100E-12 F	1 N/R	3 FAILED	3000 13(INPUT) 16(VCC)	102	252	13
40288		N/R	-	Digital, D	Decoder				SOWO		
	030	Z R	X X	1500 Ohms	100E-12 F	1 N/R	1 FAILED 1 FAILED	1000 N/R 1000 N/R	103	252 252	£1 £1
6207		FSC	-	Digital, C	Counter/Divider				CMOS		
	165	0676 GN	Š	1500 Ohms	100E-12 F	1 7546	2 PASSED	400 N/R	25	146	71
86707		N/R		Digital, C	Counter/Divider				CMOS		
	030	N/R	χ Χ	N/R N/R 1500 Ohms	.00E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13

	General Remarks 13	13	M	٣	13	13	13
78	Test General Remarks Remarks 252 13	252	252	252	252	252	252
Technology	Failure 1 Criteria E	CMOS 103 103	CMOS	CMOS	CMOS 103	CMOS 103 103	CMOS 103
	Voltage Pin Combination 1000 N/R	1000 N/R 1000 N/R	3000 INPUT TO OUTPUT	4000 INPUT & OUTPUT TO COMMON	1000 N/R	1000 N/R 1000 N/R	1000 N/R
	4 10	1 FAILED 1 FAILED	1 FAILED	1 FAILED	1 FAILED	1 FAILED	1 FAILED
	Number Date Number Test Pulses Code Devices Resul	1 N/R	16 N/R	18 N/R		1 N/R	Combination 1 N/R
Part <u>Description</u> 1 Digital, Counter/Divider	Test stance <u>Capacitance</u> Ohms 100E-12 F	Digital, Gate 1500 Ohms 100E-12 F	Digital, Gate	Digital, Gate 1500 Ohms 100E-12 F	Digital, Register, Shift 1500 Ohms 100E-12 F	Digital, Counter/Divider 150C Ohms 100E-12 F	Digital, Register, Shift, Combination 1500 Ohms 100E-12 F 1 N/R
Part ESD Mfr Class N/R 1	Fest Test Fest <u>Oate Type Resis</u> N/R N/R 1500	R N/R N/R	7 2 1186 SS	CA 2	7. 1 N/R N/R	// N/R N/R	N/R N/R
Part (Cont'd) Mfg N/R	Source 030	N/R 030 N,	SPR 436 1	RCA 436 1	N/R 030 N	N/R 030 N,	N/R 030 N
Part Number 40298		†0308	¢030B	÷0308	40318	40338	87£07

ΛĒ		Test General			167 13 167 13		167 13 167 13		252 13		252 13 252 13		146 14		
Technology	CMOS	Failure Te	103	SOWD	8 8 1	CMOS	8 18	CMOS	102	SOWO	103 103	CMOS	25	SOWO	•
		Test Voltage Pin Combination	1000 N/R		1200 INPUT(2)(+) OUT(1)(-) 2000 INPUT(3)(+) OUT(13)(-)		1200 INPUT(2)(+) OUT(1)(-) 1000 IN(10)(+) OUT(15)(-)		1000 N/R		1000 N/R 1000 N/R		400 N/R		
	vo	Number Test Devices Result	1 FAILED		2 FAILED 1 FAILED		2 FAILED 1 FAILED		1 FAILED		1 FAILED 1 FAILED		2 PASSED		•
	Combinati	Number Date Pulses Code	N/R		1 N/R		N/R		1 N/R		N/R		1 N/R		:
Part Descripti	Digital, Register, Shift, Combination	Test Test Resistance Capacitance	1500 Ohms 100E-12 F	Digital, Register, Shift	1500 Ohms 100E-12 F	Digital, Register, Shift	1500 Ohms 100E-12 F	Digital, Register, Shift	1500 Ohms 100E-12 F	Digital, Register, Shift	N/R 1500 Ohms 100E-12 F	Digital, Counter/Divider	1500 Ohms 100E-12 F	Digital, Counter/Divider	
Part ESD Mfr Class	~ ~	Test Date	N/R N/R	NSC 1	0878 SS	sss 1	0878 SS	NSC 1	0180 SS	N/R 1	N/R N/R	FSC 1	0676 GN	RCA 2	,00
(Cont'd)		Test	030		900		900	-	393	-	030	_	165	u.	202
Part Number (9.7001			5207		4035		4035A		40358		0707		4 0707	

Part Number		Part ESD Mfr Cla	ESD Class	Part Description	<u></u>				Voolondoot	2	
80707			-	Digital,	Counter/Divider	J _E			CMOS		
	Test	Test	Test	t Test	Test	Number	Test	Test	Failure Te	Test Ge	General
	Sour 030	ce pate	al ×	1500 Ohms	Source Date Type Resistance Capacitance 030 N/R N/R 1500 Ohms 100F-12 F	Pulses Code	Devices Result	Voltage Pin Combination	Criteria Remarks Remarks	emarks Re	marks 13
							1 FAILED	1000 N/R	103	252	5
40428		X X	-	Digital,	Latch				SUNJ		
									5		
	030	N/R	N/R	1500 Ohms	3 100E-12 F	1 N/R	1 FAILED 1 FAILED	1000 N/R 1000 N/R	103	252 252	13
7073		M OT	M	Digital,	Latch				SOMO		
									2		
	050	N/R	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	6783 N/R	102	188	13
8£707		Q/N	-	Digital	£				0070		
		¥ }	-		raten				CMOS		
	030	N/R	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13
7707		NSC	-	Digital,	Latch				CMOS		
	900	0878 SS	SS	1500 Ohms	100E-12 F	, N/R	3 FAILED	1000 INPUT(14)(+) OUT(1)(-)	81	167	13
7707		SSS	-	Digital,	Latch				CMOS		
	900	0878 SS	SS	1500 Ohms	, 100E-12 F	1 N/R	1 FAILED 1 FAILED 1 FAILED	1200 INPUT(3)(+) OUT(13)(-) 2000 INPUT(7)(+) OUT(9)(-) 600 INPUT(6)(+) OUT(9)(-)	8 18 18	167 167 167	ភ ភ
40774		SSS	-	Digital,	Latch				CMOS		
	393	0180 SS	SS	1500 Ohms	100E-12 F	1 N/R	1 FAILED	600 N/R	102	252	13

t Number Date Number Test Test acitance Pulses Code Devices Result Voltage	1 N/R 1 FAILED	00E-12 F 1 N/R 1 FAILED 1000 N/R 1 FAILED 1000 N/R	e Lock Loop	00E-12 F 9 N/R 1 FAILED 1000 INPUT TO COMMON 1 FAILED 1000 INPUT TO COMMON	ivibrator	00E-12 F 1 N/R 1 FAILED 1000 N/R	erter, Buffer CMOS	00E-12 F 1 N/R 2 PASSED 400 N/R	10E-12 F 1 N/R 2 PASSED 600 N/R	00E-12 F 1 N/R 1 FAILED 200 N/R 1 PASSED 800 N/R	00E-12 F 1 N/R 2 FAILED 200 N/R	erter, Buffer CMOS	00E-12 F 1 N/R 1 FAILED 200 INPUT(+) PR. SUPPLY(-)
Description Digital, Latch Test Test Resistance Capacitance	Tul ses		40468 SSS 1 Linear, Phase Lock Loop		4047 N/R 1 Digital, Multivibrator		4049 FSC 1 Digital, Inverter, Buffer	,		(-		4049 SSS 1 Digital, Inverter, Buffer	

Technology CMOS	re Test General <u>ria Remarks Remarks</u> 81 167 13	83 252 13	83 252 13	83 252 13	ιο.	56 252 5 56 252 5 56 252 5 54 252 5	252 1 252 1	56 252 13 56 252 13	56 252 5 56 252 5 56 252 5 56 252 5	83 252 13	83 252 13	83 252 13
CMOS	tege Pin Combination Criteria 1000 INPUT(9)(+) OUT(10)(-) 81 600 INPUT(5)(+) OUT(4)(-) 81	œ			CMOS	GATE(+) VSS(-) GATE(+) VSS(-) GATE(+) VSS(-) GATE(+) VSS(-)		1350 GATE(+) VSS(-) 1350 GATE(+) VSS(-)	INPUT(+) VSS(-) INPUT(+) VSS(-) INPUT(+) VSS(-) INPUT(+) VSS(-)			
	Tes Vol	D 200 N/R	D 400 N/R	D 600 N/R		900 1250 1520	1125		900 1250 1520 1520	D 200 N/R	0 400 N/R) 600 N/R
	Code Devices Result N/R 3 FAILED	5 PASSED	5 PASSED	5 PASSED		3 FAILED 10 FAILED 10 FAILED 2 PASSED	7 18	16 FAILED 9 PASSED	3 FAILED 10 FAILED 10 FAILED 2 PASSED	5 PASSED	5 PASSED	5 PASSED
uffer	Number Pulses	1 N/R	1 N/R	1 N/R	uffer	1 N/R	1 N/R	1 N/R	1 N/R	1 N/R	1 N/R	1 N/R
Inverter, Buffer	Test <u>Capacitance</u> 100E-12 F	100E-12 F	100E-12 F	100E-12 F	Inverter, Buffer	150E-12 F	150E-12 F	150E-12 F	150e-12 F	100E-12 F	100E-12 F	100E-12 F
Digital,	Test Test Iype Resistanc SS 1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	Digital,	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms
SSS	Test <u>Date</u> 0878	0878 GN	0878 GN	0878 GN	NSC 1	0278 ss	0278 GN	0278 GN	0478 \$\$	0878 GN	0878 GN	0878 GN
(0,100)	Test Source 006	011	012	013		060	091	092	121	110	012	013
Number 4049					6707							

Part Number		Part ESD Mfr Cla	ESD Class	Part Description	ç				Technology	2	
40707			-	Digital,	Inverter, Buffer				CMOS		1
	Test	Test Test Test Test	t Test	Test	Test	Date	•		Failure Test		General
	<u>8</u>	108 0478 SS	SS	1500 Ohms	150F-12 F	1 N/R	S FATIED	1200 INDITES VCC-1	Criteria Kemarks		Kemarks
								1750 INPUT(+) VCC(-)	56 56	252	, 50
								2200 INPUT(+) VCC(-)	29	252	. 5
							2 PASSED	2200 INPUT(+) VCC(-)	26	252	7
46707		SSS	-	Digital, I	Inverter, Buffer	_			CMOS		
	393	0878	SS E	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1500 N/R	102	252	13
	393	0180	0180 SS	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1000 N/R	102	252	13
	393	0784	0784 SS	1500 Ohms	100E-12 F	1 N/R	1 FAILED	800 N/R	102	252	13
4049UB		RCA	-	Digital, In	Inverter, Buffer	د			CMOS		
	109	0478 \$\$	SS	1500 Ohms	150E-12 F	1 N/R	3 FAILED	980 INPUT(+) VCC(-)	56	252	2
							10 FAILED 10 FAILED	1460 INPUT(+) VCC(-) 1950 INPUT(+) VCC(-)	% % %	252	יט יט
							2 PASSED	1950 INPUT(+) VCC(-)	29	252	· v
806707		N/R	-	Digital, Ir	Inverter, Buffer	,			CMOS		
	030	N/R	N/R	N/R N/R 1500 Ohms 100E-12	100E-12 F	1 N/R	1 FAILED 1 FAILED	1000 N/R 1000 N/R	103	252 252	13
4050		FSC	~	Digital, Ir	Inverter, Buffer	,			CMOS		
	165	0676 GN	8 5	1500 Ohms	100E-12 F	1 N/R	2 PASSED	400 N/R	22	146	14
	200	N/R	NS.	1500 Ohms	100E-12 F	1 N/R	2 PASSED	400 N/R	82	252	13

	ii.	Generat Remarks	13	13	5 5	2		14	13	<u>.</u> 5	13	13	13		13	13	13		54
		*s	252	252	252	Š		146	167	167	252	252	252		252	252	252		100
Technology	CMOS		82	82	82	70	CMOS	57	8 .	<u>8</u>	83	83	83	CMOS	83	83	83	CMOS	52
		Number Test Test Devices Result Voltage Pin Combination	600 N/R	1000 N/R	1000 N/R			400 N/R	1200 INPUT(11)(+) OUT(12)	2000 INPUT(14)(+) OUT(15)	200 N/R	400 N/R	600 N/R		200 N/R	400 N/R	600 N/R		500 EACH PIN(+)
		umber Test T evices Result V	2 PASSED	2 FAILED	1 FAILED			2 PASSED		2 FAILED 1 FAILED	5 PASSED	5 PASSED	5 FAILED		5 PASSED	5 PASSED	5 PASSEC		1 FAILED
		0) 611	1 N/R	1 N/R	1 N/R		_	1 N/R	1 N/R		1 N/R	1 N/R	1 N/R	L	1 N/R	1 N/R	1 N/R	(1 N/R
-	Inverter, Buffer	Test Japacitance	100E-12 F	100E-12 F	100E-12 F		Inverter, Buffer	100E-12 F	100E-12 F		100E-12 F	100E-12 F	100E-12 F	Inverter, Buffer	100E-12 F	100E-12 F	100E-12 F	Inverter, Buffer	200E-12 F
Part Description	Digit 41, 11		1500 Ohms	1500 Ohms	1500 Ohms		Digital, Ir	1500 Ohms	1500 Ohms		1500 Ohms	1500 Ohms	1500 Ohms	Digital, Ir	1500 Ohms	1500 Ohms	1500 Ohms	Digital, Ir	1000 Chms
Part ESD Mfr Class			N/R GN	N/R GN	N/R GN		SSS 1	0676 GN	0878 SS		0878 GN	0878 GN	0878 GN	NSC 1	0878 GN	0878 GN	0878 GN	N/R 1	N/R SS
(Cont'd)		Test	800	600	010			165	900		011	012	013		110	012	013		384
Part							0505							0507				0507	

Part Number 4050A		Part ESD Mfr Clar SSS	- Is	Part <u>Description</u> Digital, Inv	on Inverter, Buffer				Technology		J
	Test Source 393	Test Test Test Ce Date Type Resi 0878 SS 1500	Test Type SS	Test Test Test Test Source Date Type Resistance 393 0878 SS 1500 Ohms	Test <u>Capacitance</u> 100E-12 F	Number Date Number Test Pulses Code Devices Resul	비유	Test Voltage Pin Combination 600 N/R	Failure Test Criteria Remai 102	252 ks	General Remarks 13
4050A	393	NSC 8780		Digital, Ir 1500 Ohms	Inverter, Buffer 100E-12 F	1 N/R	1 FAILED	2000 N/R	CMOS 102	252	13
4050A	393	LEA 0180 SS	_	Digital, 1r 1500 Onms	Inverter, Buffer 100E-12 F	1 N/R	1 FAILED	1200 N/R	смоs 102	252	13
4050B	030	N/R 1		Digital, Ir 1500 O⊤ms	Inverter, Buffer 100E-12 F	1 N/R	1 FAILED 1 FAILED	1000 N/R 1000 N/R	CMOS 103 103	252 252	£ 13
80507	72 7	RCA OSBB CC	_	Digital, Ir	Inverter, Buffer			THE PROPERTY OF THE PROPERTY O	CMOS	25.2	~
	736	0588 9	s s	1500 Ohms		11 N/R	5 FAILED	1400 INPUT TO COMMON	v 1v	252	n 10
	436	1186 9	ss ss	1500 Ohms	100E-12 F 100E-12 F	4 N/R 18 N/R	1 FAILED 1 PASSED 1 PASSED	500 INPUT TO OUTPUT 4000 N/R 4000 N/R	~ ~ ~	252 252 252	м мм
•	436	1186 SS	,	S	100E-12 F	14 N/R	5 FAILED	2000 INPUT TO GND	5	252	٣
- 607	393	0784 SS		Digital, Mi 1500 Ohms	multiplexer 100E-12 F	1 N/R	1 FAILED	3000 N/R	102	252	13

Part Number 40518	Part ESD Mfr Cla	ESO Class	Part <u>Description</u> Digital, Mul	on Multiplexer				Technology CMOS	λĒι	
	Test Test Source Date 030 N/R		Test Test <u>Iype Resistance</u> N/R 1500 Ohms	Test <u>Capacitance</u> 100E-12 F	Number Date Number Pulses Code Devices 1 N/R	Test Result FAILED FAILED	Voltage Pin Combination 1000 N/R 1000 N/R	Failure 1 Criteria F 103	Remarks F 252 252	General Remarks 13
40528	N/R 030 N/R	× × ×	Digital, Multiplexe 1500 Ohms 100E-12	Multiplexer 100E-12 F	1 N/R	1 FAILED 1 FAILED	1000 N/R 1000 N/R	CMOS 103 103	252	13
7053	NSC 122 0478	.c 1 0478 SS	Digital, Multiplexe 1500 Ohms 150E-12	Multiplexer . 150E-12 F	1 N/R	3 FAILED 10 FAILED	720 VEE(+) SELECT A(-) 1070 VEE(+) SELECT A(-)	CMOS 56 56 56	252	יט יט ת
40538	RCA 110 0478	.A 1 0478 SS	Digital, M	Multiplexer . 150E-12 F	1 N/R	2 PASSED 2 PASSED 3 FAILED		26 CMOS 56 56	252	n in .
88507	FSC	-	Digital, M	Multiplexer		10 FAILED 10 FAILED 2 PASSED	740 VEE(+) SELECT A(-) 1020 VEE(+) SELECT A(-) 1020 VEE(+) SELECT A(-)	56 56 56 CMOS	252 252 252	v v v
	126 0478	0478 SS	15v0 Ohms	150E-12 F	N/ R	3 FAILED 10 FAILED 10 FAILED 2 PASSED	1610 VEE(+) SELECT A(-) 1950 VEE(+) SELECT A(-) 2200 VEE(+) SELECT A(-) 2200 VEE(+) SELECT A(-)	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	252 252 252 252	N N N N
88507	N/R 030 N/R	r / R	Digital, M 1500 Ohms	Multiplexer 100E-12 F	1 N/R	1 FAILED	1000 N/R	CMOS 103	252	13

Par Mfr N/R	Class Descript 1 Digital,	exer					
Test Test Test Test Test Source Date Type Resistance Capac 030 N/R N/R 1500 Ohms 100E-	യിറ	itance 12 F	Number Date Number Pulses Code Devices 1 N/R	ices Result Vo	Number Test Test Devices Result Voltage Pin Combination 1 FAILED 1000 N/R	Failure Test Criteria Remarks 103 252	Remarks Remarks 252 13
N/R 3 Linear, Switch N/R SS 100 Ohms N/R	£ ~		1 N/R	15 FAILED	76 VSS(+) INPUT(-)	CMOS 47	186
NSC 1 Linear, Switch 0184 SS 1500 Ohms 100E-12		12 F	3 N/R	10 FAILED	400 N/R	CMOS 25	252
N/R 1 Linear, switch	ر JE-12	LL.	1 N/R	1 FAILED 1 FAILED	1000 N/R 1000 N/R	CMOS 103 103	252
RCA 1 Linear, Switch	-					CMOS	
1186 SS 1500 Ohms 100E-12 1186 SS 1500 Ohms 100E-12)E-12	u. u.	16 N/R 17 N/R	1 FAILED 1 FAILED	3000 INPUT TO GND 3500 INPUT TO GND	יע יע	252
1186 SS 1500 Ohms 100E-12	JE - 12	u.	14 N/R	1 FAILED	2000 INPUT TO GND	ĸ	252
N/R 1 Digital, Multiplexer	iplexe	L.				CMOS	
N/R N/R 1500 Ohms 100E-12	JE-12	u.	N/R	1 FAILED 1 FAILED	1000 N/R 1000 N/R	103 103	252
N/R 1 Digital, Gate						SOWO	
N/R N/R 1500 Ohms 100E-12 F	JE-12 1		1 N/R	1 FAILED	1000 N/R	103	252

1		General Pemar. c	3 2		4		۶۲		v v	v rv		13		יטיטיטי
97		٩	252		146		146		252	252		252		252 252 252 252 252
Technology	รถษา	Failure Test	103	CMOS	57	CWOS	25	CMOS	56	oc 56	CMOS	103	CMOS	56 56 56
		Test	1000 N/R		400 N/R		400 N/R			1600 VDD(+) GATE(-) 1600 VDD(+) GATE(-)		1000 N/R 1000 N/R		730 VDD(+) GATE(-) 1080 VDD(+) GATE(-) 1510 VDD(+) GATE(-)
		Test			2 PASSED		2 PASSED		3 FAILED 10 FAILED	10 FAILED 2 PASSED		1 FAILED 1 FAILED		3 FAILED 10 FAILED 10 FAILED
		Date	1 N/R		1 N/R		1 N/R		1 N/R			1 N/R		1 N/R
Part Description	Digital, Gate	Test Test	1500 Ohms 100E-12 F	Digital, Inverter, Buffer	1500 Ohms 100E-12 F	Digital, Inverter, Buffer	1500 Ohms 100E-12 F	Digital, Inverter, Buffer	1500 Ohms 150E-12 F		Digital, Inverter, Buffer	1500 Ohms 100E-12 F	Digital, Inverter, Buffer	1500 Ohms 150E-12 F
ESD Class	~ ~	Test Test	N/R N/R	FSC 1	0676 GN	sss 1	0676 GN	NSC 1	0278 SS		N/R 1	N/R N/R	RCA 1	02 78 SS
(Cont'd)		Test	030		165		165		680			030		038
اے	40 68B			6907		6907		86907			86907		806907	

Technology CMOS	Failure lest General Criteria Remarks Remarks 5 252 3 5 252 3	CMOS 103 252 13	CMOS 57 146 14	CMOS 105 247 11	CMOS 103 252 13 103 252 13	CMOS 103 252 13 103 252 13	CMOS 103 252 13
	Voltage Pin Combination 4000 N/R 4000 N/R	1000 N/R	400 N/R	2000 S/R	1000 N/R 1000 N/R	1000 N/R 1000 N/R	1000 N/R
	#1 8 B	1 FAILED 100	2 PASSED 40	1 PASSED 200	1 FAILED 1000	1 FAILED 1000 1 FAILED 1000	1 FAILED 1000
Je	Number Date Number Test Pulses Code Devices Resul 18 N/R 1 PASSE	ar 1 N/R	1 7602	5 N/R	1 N/R	1 N/R	I N/R
Digital, Inverter, Buffer	Test stance <u>Capacitance</u> Ohms 100E-12 F	Digital, Inverter, Buffer 1500 Ohms 100E-12 F	Digital, Gate 1500 Ohms 100E-12 F	Digital, Gate 1500 Ohms 100E-12 F	1 Digital, Gate N/R 1500 Ohms 100E-12 F	1 Digital, Gate N/R 1500 Ohms 100E-1? F	Digital, Flip-Flop 1500 Ohms 100E-12 F
RCA 1 Di	Test Test Date Type 1186 SS	N/R 1 Di N/R N/R 15	FSC 1 Di	SSS 2 Di	N/R 1 Dis N/R N/R 150	N/R 1 Dig N/R N/R 150	N/R 1 Digital, F N/R N/R 1500 Ohms
	Test <u>Source</u> 436	030	165	390	030	N 030	N 030
Number +06908		806907	0207	40708	40718	40738	89207

Part Number +0768	(Contid)	Part ESD Mfr Class N/R 1	- (8	Part <u>Description</u> Digital, Fl	on Flip-Flop				Technology CMOS	75	
	Test Source 030	Test ce Date N/R	Test Test Type Resis N/R 1500	Test Resistance 1500 Ohms	Test Test Resistance Capacitance 1500 Ohms 100E-12 F	Number Date Number Pulses Code Devices 1 N/R	Test Result FAILED	Test Voltage Pin Combination 1000 N/R	Failure Te <u>Criteria Re</u> 103	Test Ger Remarks Red 252	General Remarks 13
40778		N/R	-	Digital, G	Gate				CMOS		
	030	N/R	N/R	1500 Ohms 100E-12	100E-12 F	1 N/R	1 FAILED 1 FAILED	1000 4/R 1000 N/R	103 103	252	13
40818		RCA	2 0	Digital, Gé	Gate				CMOS		
	162	N/R S	es es	610 Ohms	100E-12 F	1 N/R	2 PASSED 2 FAILED	4500 INPUT(1)(+) 4500 INPUT(1)(-)	57 57 57	252 252	~ ~
							2 FAILED 1 PASSED	4500 OUTPUT(4)(+) 4500 OUTPUT(4)(-)	57 57	252 163	2 2
									57	252	2 6
							2 PASSED 1 FAILED	4000 VSS(7)(+)) c 57	225	7 ~
								4500 VSS(7)(-)	25	162	7
							2 PASSED 2 PASSED	4500 VDD(14)(+)	57	252 252	2 2
	736	SS 8870		1500 Ohms	100E-12 F	17 N/R	5 FAILED	3500 INPUT TO COMMON	5	252	٣
	436	1186 SS		1500 Ohms	100E-12 F	17 N/R	5 FAILED	3500 INPUT TO GND	5	252	m
40818		N/R	-	Digital, G	Gate				CMOS		
	030	N/N	α ×	1500 Ohms 100E-12	100E-12 F	1 N/R	1 FAILED 1 FAILED	1000 N/R 1000 N/R	103	252 252	13
408108		RCA	> [Digital, II	Inverter, Buffer	و ر			CMOS		
	736	07 88 SS		1500 Ohms	100E-12 F	17 8729	5 FAILED	3500 INPUT TO VSS	'	252	8

Part			os:	Part	•				- C	è	
Number			C1058	Description	c				lecunorogy	λĒ	
±0828		N/R	-	Digital, G	Gate				CMOS		
	Test	Test	Test	Test Test	Test	Number Date Number	Test	Test	Failure I	Test	General
	Source		Iype	Type Resistance	Capacitance	611		Voltage Pin Combination			Remarks
	030	α 2		1500 Ohms	100E-12 F	N/R	1 FAILED	1000 N/R	103	252	13
							1 FAILED	1000 N/R	103	252	13
0		;	•	- :					0		
4085 8		α Z	_	Digital, G	Gate				SOWO		
	030	× ∕x	X/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13
							1 FAILED	1000 N/R	103	252	13
40868		N/R	-	Digital, Gate	ate				CMOS		
	0.20	2	9	0.40 0.500	100E-12 E	9	1 6411 60	000 M 000 L	103	25.2	71
		2	2			< ₹	1 FAILED	1000 N/R	103	252	<u>.</u> £
\$607		NSC	-	Digital, Ga	Gate				CMOS		
	900	0878	SS	1500 Ohms	100E-12 F	1 N/R	1 FAILED	2000 INPUT(9)(+) QUT(10)(-)	81	167	13
							2 FAILED 1 FAILED	2500 INPUT(13)(+) OUT(11) 1500 INPUT(5)(+) OUT(4)(-)	18 18	167 167	13 13
	393	0180 SS	SS	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1500 N/R	102	252	13
40938		N/N	-	Digital, G	Gate				CMOS		
	030	x 2	N/N	1500 Ohms	100E-12 F	1 N/R	1 FAILED 1 FAILED	1000 N/R 1000 N/R	103 103	252 252	13 13
7607		RCA	2	Digital, Re	Register, Shift				CMOS		
	393	1284 SS	SS	1500 Ohms	100E-12 F	1 N/R	2 FAILED	3500 1(INPUT) 16(VDD)	102	252	13

Part Number 40998	}	Part ESD Mfr Class N/R 1	Part <u>Descripti</u> Digital,	Latch				Technology CMOS	78	1
	Test Source 030	Test Test See Date Type N/R N/R	t Test Resistance 1500 Ohms	Test Capacitance 100E-12 F	Number Date Number Pulses Code Device: 1 N/R	Test Result FAILED	Test Voltage Pin Combination 1000 N/R	Failure Te Criteria Re 103	Test Ger Remarks Ren 252	General Remarks 13
4116		MOS 1	Digital, M	Memory, RAM, Dynamic	mic			SOMN		
	061	0978 SS	1000 Ohms	220E-12 F	N/R	1 FAILED 8 FAILEO 1 PASSED	500 N/R 1000 N/R 1000 N/R	r: N N	252 252 252	£1 £1
	062	1079 GN	1000 Ohms	220E-12 F	1 N/R	6 FAILED 4 PASSED	1000 VCC(+) VBB,VDD(-) 1000 VCC(+) VBB,VDD(-)	102	252	13
	062	1079 GN	1000 Ohms	220E-12 F	5 N/R	3 FAILED 2 PASSED	1000 VCC(+) VDD,VSS(-) 1000 VCC(+) VDD,VSS(-)	102	252 252	13
	063	1079 SS	1000 Ohms	220E-12 F	1 N/R	4 FAILED 4 FAILED 2 PASSED	800 VCC(+) VBB,VDD(-) 1000 VCC(+) VBB,VDD(-) 1000 VCC(+) VBB,VDD(-)	102 102 102	252 252 252	13 13 14
	790	1079 SS	100 Ohms	2005-12 F	1 N/R	1 FAILED 4 FAILED	1000 VCC(+) VBB,VDD(-) 1200 VCC(+) VBB,VDD(-)	102	252 252	13
	990	1079 GN	100 Ohms	220E-12 F	1 N/K	2 FAILED	1000 VCC(+) VBB, VDD(-)	102	252	13
	990	1079 GN	100 Ohms	220E-12 F	2 N/R	7 FAILED 1 PASSED	1000 VCC(+) VBB,VDD(-) 1000 VCC(+) VBB,VDD(-)	102	252 252	13 13
	990	1079 GN	100 Ohms	220E-12 f	1 N/R	4 FAILED 1 PASSED	1000 VCC(+) VDD,VSS(-) 1000 VCC(+) VDD,VSS(-)	102	252 252	13 13
	990	1079 GN	1000 Ohms	220E-12 F	1 N/R	2 FAILED 3 PASSED	1200 VCC(+) VDD,VSS(-) 1200 VCC(+) VDD,VSS(-)	102	252 252	13
	129	ND 0840	1500 Ohms	100E-12 F	1 N/R	5 PASSED	500 EACH PIN(+) APTT(-)	102	252	13

	General Remarks 13	13 13	13	13		13		13		1		13	13	13
λБ	Test G	252 252	252	252		252		252		242		252 252	252	252
Technology NMOS	Failure I Criteria R 102	102 102	102	102	SOMN	<	Bipolar	103	Bipolar	105	NMOS	2 2	102	102
	Voltage Pin Combination 700 EACH PIN(+) APIT(-)	800 EACH PIN(+) APTT(-) 800 EACH PIN(+) APTT(-)	1000 EACH PIN(+) APTT(-)	1500 EACH PIN(+) APTT(-)		1000 N/R		2500 N/R		2000 S/R		500 N/R 1000 N/R	500 EACH PIN(+) APTT(-)	700 EACH PIN(+) APTT(-)
	Test Result PASSED	1 FAILED 4 PASSED	5 FAILED	5 FAILED		5 FAILED		1 FAILED		1 PASSED		4 FAILED 1 FAILED	5 PASSED	3 FAILED
RAM, Dynamic	Number Date Number Pulses Code Devices 1 N/R	1 N/R	1 N/R	1 N/R)ynamic	1 N/R	olifier	1 N/R	lifier	5 N/R	ynamic	1 N/R	1 N/R	1 N/R
nory,	Test Capacitance 100E-12 F	100E-12 F	100E-12 F	100E-12 F	emory, RAM, Dynamic	220E-12 F	Lìnear, Operational Amplifier	100E-12 F	Linear, Operational Amplifier	100E-12 F	Digital, Memory, RAM, Dynamic	220E-12 F	100E-12 F	100E-12 F
Part <u>Descripti</u> Digital, I	Test Resistance 1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	Digital, Me	1000 ohms	Lìnear, Ope	N/R 1500 Ohms	Linear, Ope	1500 Ohms	Digital, Me	1000 Ohms	1500 Ohms	1500 Ohms
Part ESD Mir Class MOS 1	Fest Test Fest Fest Source Date Type Resistance 131 0780 GN 1500 Ohms	0780 GN	0780 GN	0780 GN	TEX 1	0978 SS	N/R 2	N/R N/R	FSC 2	N/R GN	ÆEC →	0978 SS	0880 GN	0880 GN
(Cont 'd)	Fest Sour 131	133	135	137		061		030		390		061	130	132
Vante Vanber 4115					4116		4131		4136		416			

Part	(6) 100	Part ESD		ç				Tochool	>	
i de la compa	1		מון וא					AROLU IORIA	7	l
<u>4</u>		- L Z	Uigital, ⊭	, Memory, KAM, Uynamıc	amıc			SOEM M		
	Test	Test Test Test	t Test		Number Date Number	oer lest I	Test	Failure Te		General
	Sour	ce Date Iyp	e Resistance	81	Code	ices Result V	Devices Result Voltage Pin Combination	Criteria Remarks		Remarks
	132	0880 GN	1500 Ohms	100E-12 F	1 N/R	2 PASSEU	700 EACH PIN(+) APTT(-)	102	252	13
	136	0880 GN	1500 Ohms	100E-12 F	1 N/R	5 FAILED	1000 EACH PIN(+) APTT(-)	102	252	13
7164		TEX 2	Digital,	Memory, RAM, Dynamic	amic			SOWN		
	393	0884 SS	1500 Ohms 100E-12	100E-12 F	1 N/R	1 FAILED	2500 10(INPUT) 8(VCC)	102	252	13
750		NSC 2	Digital,	Processing Unit, Central	Central			NMOS		
	393	0383 SS	1500 Ohms 100E-12	100E-12 F	1 N/R	1 FAILED	2500 N/R	102	546	13
4502 B		7. R	Digital, I	, Inverter, Buffer				CMOS		
	030	N/R N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED 1 FAILED	1000 N/R 1000 N/R	103	252 252	£1
45038		8/8 L	Digita', 1	, Inverter, Buffer				CMOS		
	030	N/R N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED 1 FAILED	1000 N/R 1000 N/R	103	252 252	13
45088		N/R	Digital, L	, Latch				CMOS		
	030	N/R N/R	1500 Ohms 100E-12	100E-12 F	1 N/R	1 FAILED 1 FAILED	1000 N/R 1000 N/R	103 103	252 252	13
4511		RCA 1	Digital, D	Decoder				CMOS		
	900	0878 ss	1500 Ohms 100E-12	100E-12 F	1 N/R	2 FAILED	1500 INPUT(6)(+) OUT(10)(-)	81	167	13

Part Number (Con 4511	(Cont'd)	Part B	ESD Class	Part Description Digital, Dec	on Decoder				Technology CMOS		ı
	Test Source 006	rest ce Date 0878	Test IVPE S SS	Test Resistance 1500 Ohms	Test Number Capacitance Pulses 100E-12 F 1	Date Number Code Device N/R	#I A	Voltage Pin Combination 2000 INPUT(7)(+) OUT(9)(-)	Failure Test Criteria Remarks 81 167	st Ger narks Ren 167	General Remarks 13
45118		N/R	-	Digital, Dec	Decoder				CMOS		
	030	N/R		N/R 1500 Ohms 100E-12	00E-12 F	Z/R	1 FAILED 1 FAILED	1000 N/R 1000 N/R	103	252 252	13
45128		N/R		Digital, Mul	Multiplexer				SOWO		
	030	N/R		N/R 1500 Ohms 100E-12	u.	1 N/R	1 FAILED 1 FAILED	1000 N/R 1000 N/R	103	252	13
45148		N/R	-	1 Digital, Deco	Decoder				CMOS		
	030	N/R		N/R 1500 Ohms 10	100E-12 F	1 N/R	1 FAILED 1 FAILED	1000 N/R 1000 N/R	103 103	252 252	13
45158		N/R	-	Digital, Decoder	oder				CMOS		
	030	N/R		N/R 1500 Ohms 16	100E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13
45168		N/R	-	Digital, Cour	Counter/Divider				CMOS		
	030	N/R		N/R 1500 Ohms 10	100E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13
45188		N/R	-	Digital, Coun	Counter/Divider				CMOS		
	030	N/R	N/R	N/R 1500 Ohms 10	100E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13

Part	(Cont'd)	Part ESD Mfr Cla	ESD	Part Description	c				Technology		ļ
45188			-	Digital,	Counter/Divider				CMOS		
	Test	: Test	t Test	Test Test	Test Numi	Number Date Number Test			Failure Test		General
	Sour	Source Date	e Type	Resistance	Resistance Capacitance Pulses	ses Code Devices	Result	Voltage Pin Combination	Criteria Remarks		Remarks
	030	N/R	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13
,		<u> </u>	•						SOM S		
45198		¥ ≥	-	Ulgital, u	bate				2		
	030	N/R	۳/×	1500 Ohms 100E-12 F	100E-12 F	1 N/R	1 FAILED 1 FAILED	1000 N/R 1000 N/R	103	252 252	13
45208		N/R		Digital, C	Counter/Divider				CMOS		
	030	N/R	N/R	1500 Ohms 100E-12	100E-12 F	1 N/R	1 FAILED 1 FAILED	1000 N/R 1000 N/R	103 103	252 252	13
45288		N/R	1	Digital, M	Multivibrator				CMOS		
	030	N/R	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED 1 FAILED	1000 N/R 1000 N/R	103 103	252 252	13
86857		N/R	-	Digital,	Multiplexer				CMOS		
	030	N/R	N/R	1500 Ohms 100E-12 F	100E-12 F	1 N/R	1 FAILED 1 FAILED	1000 N/R 1000 N/R	103 10 3	252	13 13
03337		2	•		4				SWD		
45558		¥ Ž	-	טופונמו, ט	Jacopan				5		
	030	N/R	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED 1 FAILED	1000 N/R 1000 N/R	103 103	252 252	ជ ជ
									-		
8557		N/R		Linear, Op	Operational Amplifier	ier			Bipotar		
	030	N/R	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1750 N/R	103	252	13

(Cont'd)	Part ESD Mfr Class RAY 1	Part Description Linear, Open	Part Description Linear, Operational Amplifier	Lifier			Technology Bipolar	75	
Test L	Test Test Test	Test	Test		Number Test	Test	Failure T		General
마 메	Date Type 0483 SS	Source Date Type Resistance 435 0483 SS 1500 Ohms	Capacitance 100E-12 F	Pulses Code	Devices Result 1 FAILED	Voltage Pin Combination 1000 PINS 5 TO 6	Criteria Remarks 100 244		Remarks 13
0	0483 SS	1500 Ohms	100E-12 F	20 N/R	1 FAILED	1750 PINS 2 TO 4	100	197	13
	0483 SS	1500 Ohms	100E-12 F	16 N/R	1 FAILED	1500 PIN 2 TO 4	100	197	13
	0483 SS	1500 Ohms	100E-12 F	24 N/R	1 FAILED	2000 PINS 2 TO 4	100	197	13
	0483 SS	1500 Ohms	100E-12 F	28 N/R	1 FAILED	2250 PINS 2 TO 4	100	197	13
	0483 GN	1500 Ohms	100E-12 F	10 N/R	3 FAILED 3 FAILED	2000 INPUT TO GND 2000 INPUT TO INPUT	100	252 252	13 13
	0483 SS	1500 Ohms	100E-12 F	12 N/R	4 FAILED	1250 PINS 2 TO 4	100	197	13
	0483 SS	1500 Ohms	100E-12 F	8 N/R	1 FAILED	1250 PINS 5 TO 6	100	544	13
	0483 SS	1500 Ohms	100E-12 F	12 N/R	2 FAILED	1500 PINS 5 TO 6	100	544	13
	0483 SS	1500 Ohms	100E-12 F	16 N/R	3 FAILED	1750 PINS 5 TO 6	100	544	13
	0483 SS	1500 Ohms	100E-12 F	20 N/R	2 FAILED	2000 PINS 5 TO 6	100	544	13
	0483 SS	1500 Ohms	100E-12 F	24 N/R	1 FAILED	2250 PINS 5 TO 6	100	544	13
	0483 GN	1500 Ohms	100E-12 F	10 N/R	6 PASSED	2000 N/R	100	252	13
	N/R 1	Digital, Ar	Arithmetic, Lo	Logic Unit			CMOS		
	N/R N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED 1 FAILED	1000 N/R 1000 N/R	103	252	13
~	N/R	Linear, Com	omparator				CMOS		
	N/R N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13

	Test General Remarks 252 13		252 13 252 13	252 13		146 14		252 13		149 13	149 13	252 4	252 4	252 4	
Technolo3Y CMOS	Failure Test Criteria Remar 103	NMOS	102 102	102	CMOS	25	Bipolar	19	SOWN	97	97	97	97	97	
	Test Voltage Pin Combination 1000 N/R		500 EACH PIN(+) APTT(-) 500 EACH PIN(+) APTT(-)	700 EACH PIN(+) APTI(-)		400 N/R		850 EACE PIN TO 4 & 11 (+ -)		750 PIN 5	1000 PIN 5	1500 PIN 5	1750 PIN 5	2000 PIN 5	
	Test Result		4 FAILED 1 PASSED	5 FAILED		2 PASSED		5 FAILED		8 FAILED	7 FAILED	2 FAILED	5 FAILED	7 FAILED	
	Code N/R)ynamic	1 N/R	1 N/R		1 7603	lifier	1 N/R	Static	6 N/R	8 N/R	12 N/R	14 N/R	16 N/R	
ion Comparator	Test Number <u>Capacitance Pulses</u> 100E-12 F 1	Memory, RAM, Dynamic	100E-12 F	100E-12 F	Latch	100E-12 F	Operational Amplifier	100E-12 F	Memory, RAM, S	100E-12 F	100E-12 F	0	0	0	
Part <u>Description</u> Linear, Comp	Test Test Test Test Source Date Type Resistance 030 N/R N/R 1500 Ohms	Digital, Me	1500 Ohms	1500 Ohms	Digital, La	1500 Ohms 100E-12	Lìnear, Ope	1500 Ohms	Digital, Me	1500 Ohms	1500 Ohms	0 Ohms	0 Ohms	0 Ohms	
Part ESD Mfr Class N/R 1	Test Test Ce Date Type N/R N/R	HIT 1	0780 GN	0780 GN	FSC 1	0676 GN	RAY 1	1086 SS	VAR 3	0683 SS	0683 \$\$	0683 SS	0683 SS	0683 SS	
(Cont'd)	Test <u>Source</u> 030		130	132		165		392		727	757	423	753	753	
Part Number 45858		4716			7527		1741		4801						

2300		Part ESD	Part					yac ordinal	,	
506			Digital, Mu	Multiplexer				CMOS		1
	Test	Test Test Test	Test	Test	Number Date Number Test		Test	Failure Test		General
	Sour	Source Date Type Resistance	Resistance	Capaci tance	Pulses Code Devices Result	ices Result Vo	Voltage Pin Combination	Criteria Re	Remarks Rem	Remarks
	030	N/R N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13
507A		HAR 1	Digital, Mu	Multiplexer				CMOS		
	436	1186 SS	1500 Ohms	100E-12 F	7 8712	2 FAILED	800 IMPUT TO OUTPUT	5	252	3
	436	1186 SS	1500 Ohms	100E-12 F	17 8712	2 FAILED	3500 OUTPUT TO GND	2	252	23
808		0/2	Digital M	Multiplexer				SOM		
Ş		-		i de la constante de la consta				5		
	030		N/R N/R 1500 Ohms	100E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13
508/6108		SIX 1	Digital, Mu	Multiplexer				SOWO		
	436	1186 SS	1500 Ohms	100E-12 F	18 8651	5 PASSED	4000 N/R	'n	252	3
	436	1186 SS	1500 Ohms	100E-12 F	16 8651	5 FAILED	3000 OUTPUT TO GND	5	252	М
	436	1186 SS	1500 Ohms	100E-12 F	18 8651	5 PASSED	4000 N/R	ų.	252	М
	436	1186 SS	1500 Ohms	100E-12 F	3 8651	4 FAILED	400 INPUT TO OUTPUT	5	252	М
51086		INT 1	Digital					CMOS		
	428	N/R GN	1500 Ohms	100E-12 F	5 N/R	10 PASSED	1200 N/R	13	252	13
5214		HYB 3	Digital,	Converter, A/D-D/A	D/A			Bipolar		
	436	1186 SS	1500 Ohms	100E-12 F	18 8628	5 PASSED	4000 N/R	īv	252	٣

Part Number 32168		Part ESD Mfr Class HYB 1	Part Ss Descript 1 Digital,	ion Converter, A/D-D/A	-D/A			Techno ogy Bipola		1
	Test	Test Te		Test	Date	Test	Test Valtada Din Combination	failure Test Criteria Remarks	st General narks Remarks	ral rks
	20ur	<u>Source Date 1ype</u> 436 1186 SS	ype kesistance s 1500 Ohms	100E-12 F	13 N/R	FAILED		5		ľ
32832		N CR	1 Digital, A	Memory, EAROM, EEPROM	EEPROM			WOS		
	736	1186 SS	S 1500 Ohms	100E-12 F	14 N/R	2 FAILED	2000 INPUT TO GND	5	252	м
5309-1		MON	1 Digital, A	Memory, PROM				STTL		
	392	1086 SS	s 1500 Ohms	100E-12 F	1 N/R	5 FAILED	450 EACH PIN TO 10 & 20 (+ -)	19	252	13
532		N/R	1 Linear					Bipoter		
	030	χ Χ	N/R 1500 Ohms	100E-12 F	1 N/R	1 FAILED 1 FAILED 1 FAILED	1250 N/R 1250 N/R 1250 N/R	103 103 103	252 252 252	13
2400		FSC	1 Digital, 1	Gate				TTL		
	390	N/N	GN 1500 Ohms	1500 Ohms 100E-12 F	5 N/R	1 PASSED	2000 s/R	105	247	11
	736	1186	ss 1500 Ohms	100E-12 F	16 N/R	1 FAILED	2600 INPUT TO GND	\$	252	10
	436	1186	ss 1500 Ohms	100E-12 F	14 N/R	1 FAILED	2000 INPUT TO OUTPUT	u)	252	m
	436	1186	SS 1500 Ohms	100E-12 F	15 N/R	1 FAILED	2500 INPUT TO GND	u i	252	6
	927	1186 SS	ss 1500 Ohms	100E-12 F	12 N/R	2 FAILED	1600 INPUT	5	252	m
2400		TEX	3 Digital,	Gate				77.		
	026	0178	SS 100 Ohris	. 200E-12 F	1 N/R	4 FAILED	763 INPUT(1)(+) GND(7)(-)	ત્રા	285	13

	General Remarks 11	13	٣	21	- 2	F	٣	Ξ
, day	Test Remarks 247	285	252	186	247	247	252	247
Techmilogy TTL	Failure Test Criteria Remarks 10. 247	177.	ಬ್	111	TTL 10-3	11L 105	1TL 5	17.L 105
	Voltage Pin Combination 2000 S/R	625 INPUT(1)(+) GND(7)(-)	1500 INPUT TO OUTPUT	99 INPUT(+) GND(-)	2000 S/R	2000 3/R	1600 INPUT TO GNE	2000 S/R
	Test Result PASSED	4 FAILED	5 FAILED	15 FAILED	1 PASSED	1 PASSED	3 FAILED	1 PASSED
	Number Pulses 5	1 N/R	12 N/R	N/R	5 N/R	5 N/R	12 N/R	er 5 N/R
Part ESD Pirt Mfr Class Description TEX 3 D giral, Gate	Test Test Test Source Date Type Resistance Capacitance 390 N/R GN 1500 Ohms 100E-12 F	C 1 Digital, Gate 0178 SS 100 Ohms 200E-12 F	1186 SS 1500 Ohms 100E-12 F	R 3 Digital, Gate N/R SS 100 Ohms N/R	SX 2 Digital, Gate N/R GN 1500 Ohms 100E-12 F	ic 2 Digital, Gate N/R GN 1500 Ohms 100E-12 F	5 ' Digital, Gate 1186 SS 1500 Ohms 100E-12 F	sc – 2 Digital, Inverter, Buffer N/R GN 1500 Ohms 100E-12 F
Contid) Mfr	Source 390	NSC 028 0.	736	N/R 245 N	1EX 390 N	FSC SP2 K	NSC 436 17	FSC 390 N
Part Number 5+00		5400		2+00	5401	50.45	ر. د:	7075

Part Number (Cont'd) S404	(a)	Part (ESO Class	Part Descripti Oigital,	on Inverter, Buffer				Technology TTL	78	
	Test Source 390	rest ce Date N/R	t Test e <u>Type</u> GN	Test Fest Fest Fest Source Date Type Resistance 390 N/R GN 1500 Ohms	Test <u>Capacitance</u> 100E-12 F	Number Date Number Pulses Code Devices 5 N/R	Test Result PASSED	Test <u>Voltage Pin Combination</u> 2000 S/R	Failura Te <u>Criteria Re</u> 105	Test Ger Remarks Re 247	General Remarks 11
2404		R/R	2	Digital, Ir	Inverter, Buffer	į			TTL		
	030	N/R	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	2500 N/R	133	252	13
	321	N/R	3	1500 Obms	100E-12 F	200 N/R	2 PASSED	1000 VCC(14)(+) IN.(1)(-)	62	252	13
	:5:	,	3	1500 Ohms	200E-12 F	200 N/R	1 PASSED	1500 VCC(14)(+) IN.(1)(-)	79	252	13
	332	8, 1	N	1500 Ohms	N/R F	200 N/R	1 PASSED	1575 VCC(14)(+) IN.(1)(-)	62	252	13
	333	8/8	S	1500 Ohms	200E-12 F	1 N/R	' FAILED	1615 VCC(14)(+) IN.(1)(-)	77	252	13
	33.	877	2 5	1500 Ohms	200E-12 F	1 N/R	1 PASSED	1630 VCC(14)(+) IN.(1)(-)	79	252	13
	ŕ	× ×	75	1500 Obms	200E - 12 F	2 N/R	1 FAILED	1650 VCC(14)(+) IN.(1)(-)	121	252	13
		or Ž	3	1500 Ohms	200E - 12 F	3 N/R	2 FAILED	1650 VCC(14)(+) IN.(1)(-)	121	252	13
	:-	,	Z,	₹	5	4 N/R	1 FAILED	1650 VCC(14)(+) IN.(1)(-)	121	252	13
		7	Z,	.9.3 Jam.	200E - 12 F	Set N/R	1 FAILED	1650 VCC(14)(+) IN.(1)(-)	77	252	13
	:53	٧ خ	2	1530 Ohms	200E-12 F	159-37R	1 FAILED	1650 VCC(14)(+) IN.(1)(-)	77	252	13
	335	α. ×	S	1500 Ohms	200E · 12 F	2 N/R	1 PASSED	1650 VCC(14)(+) IN.(1)(-)	121	252	13
	335	Z/R	N.S	1500 Ohms	200E-12 F	N/R	1 PASSED	1670 VCC(14)(+) IN.(1)(-)	79	252	13
	337	M/R	N 5	1500 Ohms	200E-12 F	3 N/8	1 FAILED	1675 VCC(14)(+) IN.(1)(-)	121	252	13
	337	N/R	2	1500 Ohms	200E-12 F	2 N/R	1 FAILED	1675 VCC(14)(+) IN.(1)(-)	7.7	252	13

		Genera(Remarks 13	13	13	13	13	13	13	13	13	13	13	13	13	13 13	13	13
Ž		Test G	Remarks R 252	252	252	252 252	252	252	252	252	252	252 252	252	252	252	252 252	252	252
200 100420	11	Failure I		121	121	77 121	62	121	62	62	7.7	121	11	77	77	121	1.7	121
		Test	Voltage Pin Combination 1675 VCC(14)(+) IN.(1)(-)	1700 VCC(14)(+) IN.(1)(-)	1700 VCC(14)(+) IN.(1)(-)	1700 VCC(14)(+) IN.(1)(-) 1700 VCC(14)(+) IN.(1)(-)	1700 VCC(14)(+) IN.(1)(-)	1700 VCC(14)(+) IN.(1)(-)	1730 VCC(14)(+) IN.(1)(-)	1750 VCC(14)(+) IN.(1)(-)	1750 VCC(14)(+) IN.(1)(-)	1750 VCC(14)(+) IN.(1)(-) 1750 VCC(14)(+) IN.(1)(-)	1750 VCC(14)(+) IN.(1)(-)	1750 VCC(14)(+) IN.(1)(-)	1750 VCC(14)(+) IN.(1.(-)	1750 VCC(14)(+) IN.(1)(-) 1750 VCC(14)(+) IN.(1)(-)	1750 VCC(14)(+) IN.(1)(-)	1750 VCC(14)(+) IN.(1)(-)
		Test	Devices Result 1 PASSED	1 FAILED	2 FAILED	2 FAILED 1 FAILED	1 PASSED	1 FAILED	1 PASSED	1 PASSED	1 FAILED	1 FAILED 1 FAILED	3 FAILED	1 FAILED	1 FAILED	1 FAILED 6 PASSED	1 FAILED	1 FAILED
	ter	Numbar Date Number	Putses Code 200 N/R	1 N/R	2 N/R	4 N/R	200 N/R	2 N/R	1 N/R	1 N/R	50 N/R	1 N/R	2 N/R	3 N/R	4 N/R	1 N/R	3 N/R	4 N/R
5	Inverter, Butter	Test	Capacitance 200E-12 F	200E-12 F	200E-12 F	200E-12 F	200E-12 F	200E-12 F	200E-12 F	200E-12 F	200E-12 F	200E-12 F	200E-12 F	200E-12 F	200E-12 F	200E-12 F	200E-12 F	200E-12 F
Part Description	Digital, I	Test Test	Resistance 1500 Ohris	1500 Chms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms
ESD Class			Type	Š	3	3	S	NS.	N _S	Z	N	N.	N _S	S.	N _S	N G	S	Š
	ا (ک	Test	Source Date	N/R	N/N	N/R	X/R	χ α	N/R	N/R	N/N	х Х	X /R	N/R	N/R	N/R	X /R	N/R
(Figure)	1	Test	<u>Source</u> 337	338	338	338	338	338	339	340	340	340	340	340	340	340	340	340

Total Total Total Number Date Number Total Tot	. 101	Class C	Digital, In	nverter, Buffer	fer			Technology TTL	Abol	
200E-12 F 1 N/R 1 PASSED 1775 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 1 N/R 1 PASSED 1775 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 1 N/R 1 PASSED 1800 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 1 N/R 1 PASSED 1800 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 2 N/R 1 FAILED 1800 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 3 N/R 1 FAILED 1800 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 5 N/R 1 FAILED 1800 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 5 N/R 1 FAILED 1800 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 5 N/R 1 FAILED 1800 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 7 N/R 1 FAILED 1800 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 1 N/R 2 FAILED 1800 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 1 N/R 2 FAILED 1800 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 1 N/R 2 FAILED 1800 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 1 N/R 1 PASSED 1800 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 1 N/R 1 FAILED 1850 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 2 N/R 1 FAILED 1850 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 2 N/R 1 FAILED 1850 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 2 N/R 1 FAILED 1850 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 2 N/R 1 FAILED 1850 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 2 N/R 1 FAILED 1850 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 2 N/R 1 FAILED 1850 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 2 N/R 1 FAILED 1850 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 2 N/R 1 FAILED 1850 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 2 N/R 1 FAILED 1800 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 2 N/R 1 FAILED 1800 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 2 N/R 1 FAILED 1800 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 2 N/R 1 FAILED 1800 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 2 N/R 1 FAILED 1800 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 2 N/R 1 FAILED 1800 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 2 N/R 1 FAILED 1800 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 2 N/R 1 FAILED 1800 VCC(14)(+) IN.(1)(-) 77 252 200E-13 F 2 N/R 1 FAILED 1800 VCC(14)(+) IN.(1)(-) 77 252 200E-14 F 2 N/R 1 FAILED 1800 VCC(14)(+) IN.(1)(-) 77 252 200E-15 F 2 N/R 1 FAILED 1800 VCC(14)(+) IN.(1)(-) 77 252 200E-15 F 2 N/R 1 FAILED 1800 VCC(14)(+)	Test Test	Test	9	Test	Number	Number	Test	Failurc		General
200E-12 F 1 M/R 1 PASSED 1775 VCC(14)(+) 1M.(1)(-) 79 252 200E-12 F 1 M/R 1 FAILED 1800 VCC(14)(+) 1M.(1)(-) 77 252 200E-12 F 2 M/R 1 FAILED 1800 VCC(14)(+) 1M.(1)(-) 77 252 200E-12 F 3 M/R 1 FAILED 1800 VCC(14)(+) 1M.(1)(-) 77 252 200E-12 F 3 M/R 1 FAILED 1800 VCC(14)(+) 1M.(1)(-) 77 252 200E-12 F 5 M/R 1 FAILED 1800 VCC(14)(+) 1M.(1)(-) 77 252 200E-12 F 5 M/R 1 FAILED 1800 VCC(14)(+) 1M.(1)(-) 77 252 200E-12 F 200 M/R 1 FAILED 1800 VCC(14)(+) 1M.(1)(-) 79 252 200E-12 F 1 M/R 1 FAILED 1800 VCC(14)(+) 1M.(1)(-) 79 252 200E-12 F 1 M/R 2 FAILED 1850 VCC(14)(+) 1M.(1)(-) 77 252 200E-12 F 2 M/R 1 FAILED 1850 VCC(14)(+) 1M.(1)(-) 77 252 200E-12 F 6 M/R 1	N/R GN 1500	1500	Stance Ohms	200E - 12 F	701 Ses		<u> </u>			Kemarks 13
200E-12 F 1 M/R 1 PASSED 1800 VCC(14)(+) 1M.(1)(-) 79 252 200E-12 F 2 M/R 1 FAILED 1800 VCC(14)(+) 1M.(1)(-) 77 252 200E-12 F 3 M/R 1 FAILED 1800 VCC(14)(+) 1M.(1)(-) 77 252 200E-12 F 3 M/R 1 FAILED 1800 VCC(14)(+) 1M.(1)(-) 77 252 200E-12 F 5 M/R 1 FAILED 1800 VCC(14)(+) 1M.(1)(-) 77 252 200E-12 F 9 M/R 1 FAILED 1800 VCC(14)(+) 1M.(1)(-) 77 252 200E-12 F 1 M/R 2 FAILED 1800 VCC(14)(+) 1M.(1)(-) 77 252 200E-12 F 1 M/R 2 FAILED 1800 VCC(14)(+) 1M.(1)(-) 79 252 200E-12 F 1 M/R 1 FAILED 1850 VCC(14)(+) 1M.(1)(-) 79 252 200E-12 F 1 M/R 1 FAILED 1850 VCC(14)(+) 1M.(1)(-) 79 252 200E-12 F 1 M/R 1 FAILED 1850 VCC(14)(+) 1M.(1)(-) 79 252 200E-12 F 3 M/R 1 FA	GN 150	150	SmHC 0				1775 VCC(14)(+) IN.(1)(-)	6/		13
200E-12 F 2 M/R 1 FAILED 1800 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 3 M/R 1 FAILED 1800 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 5 M/R 1 FAILED 1800 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 5 M/R 1 FAILED 1800 VCC(14)(+) IN.(1)(-) 121 252 200E-12 F 200 M/R 1 FAILED 1800 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 1 M/R 2 FAILED 1800 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 1 M/R 1 PASSED 1800 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 1 N/R 1 PASSED 1850 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 2 M/R 1 PASSED 1850 VCC(14)(+) IN.(1)(-) 79 252 200E-12 F 3 M/R 1 PASSED 1850 VCC(14)(+) IN.(1)(-) 79 252 200E-12 F 1 N/R 1 FAILED 1850 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 1 N/R 1	GN 150	150	0 Ohms				1800 VCC(14)(+) IN.(1)(-) 1800 VCC(14)(+) IN.(1)(-)	79		13 13
200E-12 F 3 N/R 1 FAILED 1800 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 5 N/R 1 FAILED 1800 VCC(14)(+) IN.(1)(-) 121 252 200E-12 F 9 N/R 1 FAILED 1800 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 200 N/R 1 PASSED 1800 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 1 N/R 2 FAILED 1800 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 1 N/R 1 PASSED 1800 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 1 N/R 1 PASSED 1850 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 2 N/R 2 FAILED 1850 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 3 N/R 1 PASSED 1850 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 3 N/R 1 FAILED 1850 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 6 N/R 1 FAILED 1850 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 1 N/R 1	GN 150	55	O Ohms		2 N/R	1 FAILED 1 FAILED	1800 VCC(14)(+) IN.(1)(-) 1800 VCC(14)(+) IN.(1)(-)	121 77	252 252	13
200E-12 F 5 N/R 1 FAILED 1800 VCC(14)(+) IN.(1)(-) 121 252 200E-12 F 9 N/R 1 FAILED 1800 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 200 N/R 1 PASSED 1800 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 1 N/R 2 FAILED 1800 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 1 N/R 1 PASSED 1800 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 1 N/R 1 PASSED 1850 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 2 N/R 2 FAILED 1850 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 3 N/R 1 PASSED 1850 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 3 N/R 1 FAILED 1850 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 6 N/R 1 FAILED 1850 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 1 N/R 1 FAILED 1900 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 1 N/R 1	GN 15	2	OO Ohms				1800 VCC(14)(+) IN.(1)(-)	77	252	13
200E-12 F 9 N/R 1 FAILED 1800 VCC(14)(+) IN.(1)(-) 79 252 200E-12 F 200 N/R 1 PASSED 1800 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 1 N/R 2 FAILED 1800 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 1 N/R 1 PASSED 1850 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 2 N/R 2 FAILED 1850 VCC(14)(+) IN.(1)(-) 79 252 200E-12 F 2 N/R 2 FAILED 1850 VCC(14)(+) IN.(1)(-) 79 252 200E-12 F 3 N/R 1 PASSED 1850 VCC(14)(+) IN.(1)(-) 79 252 200E-12 F 5 N/R 1 FAILED 1850 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 6 N/R 1 FAILED 1850 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 1 N/R 1 FAILED 1900 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 200 N/R 1 FAILED 1900 VCC(14)(+) IN.(1)(-) 77 252	GN 15	- 2	OO Ohms				1800 VCC(14)(+) IN.(1)(-)	121	252	13
200E-12 F 200 N/R 1 PASSED 1800 VCC(14)(+) IN.(1)(-) 79 252 200E-12 F 1 N/R 2 FAILED 1800 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 1 FAILED 1800 VCC(14)(+) IN.(1)(-) 79 252 200E-12 F 1 N/R 1 PASSED 1850 VCC(14)(+) IN.(1)(-) 79 252 200E-12 F 2 N/R 2 FAILED 1850 VCC(14)(+) IN.(1)(-) 79 252 200E-12 F 3 N/R 1 PASSED 1850 VCC(14)(+) IN.(1)(-) 79 252 200E-12 F 3 N/R 1 PASSED 1850 VCC(14)(+) IN.(1)(-) 79 252 200E-12 F 6 N/R 1 FAILED 1850 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 1 N/R 1 FAILED 1900 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 1 N/R 1 FAILED 1900 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 200 N/R 1 PASSED 2000 VCC(14)(+) IN.(1)(-) 77 252	GN 15	<u> </u>	smho 00				1800 VCC(14)(+) IN.(1)(-)	121	252	13
200E-12 F 1 N/R 2 FAILED 1800 VCC(14)(+) IN.(1)(-) 77 252 4 PASSED 1800 VCC(14)(+) IN.(1)(-) 79 252 200E-12 F 1 N/R 1 PASSED 1850 VCC(14)(+) IN.(1)(-) 79 252 200E-12 F 2 N/R 2 FAILED 1850 VCC(14)(+) IN.(1)(-) 121 252 200E-12 F 3 N/R 1 PASSED 1850 VCC(14)(+) IN.(1)(-) 79 252 200E-12 F 3 N/R 1 FAILED 1850 VCC(14)(+) IN.(1)(-) 79 252 200E-12 F 6 N/R 1 FAILED 1850 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 1 N/R 1 FAILED 1900 VCC(14)(+) IN.(1)(-) 77 252 100E-12 F 200 N/R 1 PASSED 2000 VCC(14)(+) IN.(1)(-) 79 252	GN 15	-	smdo oos		200 N/R		1800 VCC(14)(+) IN.(1)(-)	&		13
200E-12 F 1 N/R 1 PASSED 1800 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 1 N/R 1 PASSED 1850 VCC(14)(+) IN.(1)(-) 79 252 200E-12 F 2 N/R 2 FAILED 1850 VCC(14)(+) IN.(1)(-) 121 252 200E-12 F 3 N/R 1 PASSED 1850 VCC(14)(+) IN.(1)(-) 79 252 200E-12 F 5 N/R 1 PASSED 1850 VCC(14)(+) IN.(1)(-) 79 252 200E-12 F 6 N/R 1 FAILED 1850 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 1 N/R 1 FAILED 1900 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 200 N/R 1 PASSED 2000 VCC(14)(+) IN.(1)(-) 79 252	GN 1		500 Ohms		1 N/R		1800 VCC(14)(+) IN.(1)(-)	80		5
200E-12 F 1 N/R 1 PASSED 1850 VCC(14)(+) IN.(1)(-) 79 252 200E-12 F 2 N/R 2 FAILED 1850 VCC(14)(+) IN.(1)(-) 121 252 200E-12 F 3 N/R 1 PASSED 1850 VCC(14)(+) IN.(1)(-) 79 252 200E-12 F 6 N/R 1 FAILED 1850 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 1 N/R 1 FAILED 1900 VCC(14)(+) IN.(1)(-) 77 252 100E-12 F 200 N/R 1 PASSED 2000 VCC(14)(+) IN.(1)(-) 79 252							1800 VCC(14)(+) IN.(1)(-) 1800 VCC(14)(+) IN.(1)(-)	2 2		£ £
200E-12 F 2 N/R 2 FAILED 1850 VCC,14,(+) IN.(1)(-) 121 252 200E-12 F 3 N/R 1 PASSED 1850 VCC(14,(+) IN.(1)(-) 79 252 200E-12 F 6 N/R 1 FAILED 1850 VCC(14,(+) IN.(1)(-) 77 252 200E-12 F 1 N/R 1 FAILED 1900 VCC(14,(+) IN.(1)(-) 71 252 100E-12 F 200 N/R 1 PASSED 2000 VCC(14,(+) IN.(1)(-) 79 252	SN SN	<u>-</u>	500 Ohms		1 N/R		1850 VCC(14)(+) IN.(1)(-) 1850 VCC(14)(+) IN.(1)(-)	79 121		<u>51</u>
200E-12 F 3 N/R 1 PASSED 1850 VCC(14)(+) IN.(1)(-) 79 252 200E-12 F 6 N/R 1 FAILED 1850 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 1 N/R 1 FAILED 1900 VCC(14)(+) IN.(1)(-) 79 252 100E-12 F 200 N/R 1 PASSED 2000 VCC(14)(+) IN.(1)(-) 79 252	GN 1		1500 Ohms			2 FAILED	1850 VCC(14)(+) IN.(1)(-)	121	252	13
200E-12 F 6 N/R 1 FAILED 1850 VCC(14)(+) IN.(1)(-) 77 252 200E-12 F 1 N/R 1 FAILED 1900 VCC(14)(+) IN.(1)(-) '21 252 100E-12 F 200 N/R 1 PASSED 2000 VCC(14)(+) IN.(1)(-) 79 252	GN 13		smdo 00s				1850 VCC(14)(+) IN.(1)(-)	62		13
200E-12 F 1 N/R 1 FAILED 1900 VCC(14)(+) IN.(1)(-) 71 252 100E-12 F 200 N/R 1 PASSED 2000 VCC(14)(+) IN.(1)(-) 79 252	SI 15	<u> </u>	sm40 00s				1850 VCC(14)(+) IN.(1)(-)	77	252	13
100E-12 F 200 N/R 1 PASSED 2000 VCC(14)(+) IN.(1)(-) 79 252	GN 15	<u> </u>	smho oo				1900 VCC(14)(+) IN.(1)(-)	12.	252	13
	GN 15	•	soo ohms		200 N/R	1 PASSED	2000 VCC(14)(+) IN.(1)(-)	97		51

Part Number (Contid) 5404	Part ESD Mfr Clas N/R	ESD Class 2	ript tal,	ion Inverter, Buffer	i.	i		TTL	Хбс	İ
S 0 8		ND GN	Date Type Resistance N/R GN 1500 Ohms	lest <u>Capacitance</u> 200E-12 F	Number Date Number Test Pulses Code Devices Result 1 N/R 1 FAILED	umber Test I evices Result v 1 FAILED	Voltage Pin Combination 2000 VCC(14)(+) IN.(1)(-)	Failure Test General Criteria Remarks Remarks 121 252 13	lest Ge temarks Re 252	General Remarks 13
390	TEX 10 N/R	SN SN	Digital, 1500 Ohms	Inverter, Buffer 100E-12 f	er 5 N/R	1 PASSED	2000 S R	דדנ 105	247	=
390	TEX 0 N/R	S GN	Digital, 1500 Ohms	Line/Bus Driver . 100E-12 F	5 N/R	1 PASSED	2000 S/R	TTL 105	247	Ξ
436	<u>χ</u>	c 2 1186 SS	Digital, 1500 Ohms	Line/Bus Driver 100E-12 F	r 15 N/R	1 FAILED	2500 INPUT TO GND	77L 5	252	м
030	N/2 0 N/R		2 Digital, I N/R 1500 Ohms	Line/Bus Driver 100E-12 F	7 1 N/R	1 FAILED	2500 N/R	TTL 103	252	13
030	N/R 0	2 N/R	Digital, 1500 Ohms	Line/Bus Driver 100E-12 F	7 1 N/R	1 FAILED	2500 N/R	T.L. 103	252	13
390	FSC N/R	2 6N	Digital, Gate 1500 Ohms 100	Gate 100E-12 F	5 N/R	1 PASSED	2000 S/R	TTL 105	247	=
390	FSC N/R	S GN	Digital, Gate 1500 Ohms 100	3ate 100E-12 F	S N/R	1 PASSED	2000 S/R	11L 105	242	=

Part		Part ESD Mfr Clay	ESD	Part Description					Technology	>	
5410			-	Digital, G	Gate				11.		ļ
	Test	Test	: Test	Test Test Test	Test	Date		Test	Failure fest		General
	Sour 436	o Date 0788	SS SS	Source Date Type Resistance 436 0788 SS 1500 Ohms	Capacitance F 100E-12 F	Pulses Code Dev 18 8711	Devices Result Vo	Voltage Pin Combination 4000 OUTPUT TO COMMON	Criteria Re	Remarks Ren 252	Remarks 3
	436	0788	0788 SS	1500 Ohms	100E-12 F	12 8711	5 FAILED	1500 INPUT TO OUTPUT	\$	252	8
	736	0788	s ss	1500 Ohms	100E-12 F	7 8711	5 FAILED	800 INPUT TO COMMON	\$	252	₩
5410		FSC	2	Digital, Gate	ate				TFL		
	390	N/R	S	1500 Ohms	100E-12 F	5 N/R	1 PASSED	2000 S/R	105	247	=======================================
54107		TEX	2	Digital, F	lip-flop				111		
	390	X R	S	1500 Ohms	100E-12 F	S N/R	1 PASSED	2000 S/R	105	247	=
5412		TEX	2	Digital, (ate				11.		
	390	N/R	2	1500 Ohms	100E-12 F	5 N/R	1 PASSED	2000 S/R	105	247	Ξ
54120		N/R	2	Digital, Ł	Digital, Line/Bus Driver	Ĺ			111		
	030	N/R	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	2500 N/R	103	252	13
54120		TEX	-	Digital, L	Digital, Line/Bus Driver	۲			11.		
	736		1186 SS	1500 Ohms	100E-12 F	10 N/R	2 FAILED	1200 INPUT TO OUTPUT	5	252	m
54121		FSC	-	Digital, M	u ltivibrator				דונ		
	390	N/R	N S	1500 Ohms	100E-12 F	5 N/R	1 PASSED	2000 S/R	105	247	;

Technology	failure Test General Criteria Remarks	(+ -) 19 252 13	111	105 247 11	5 252 3	77.	105 247 11	111	103 252 13	116	5 252 3	111	105 247 11	771	105 247 11
	Test Voltage Pin Combination	EACH PIN TO 7 & 14		2000 S/R	2000 INPUT TO OUTPUT		2000 S/R		2500 N/R		1400 INPUT TO GND		2000 S/R		2000 S/R
	Test Result			1 PASSED	2 FAILED		1 PASSED		1 FAILED		1 FAILED		1 PASSED		1 PASSED
	Number Date Number Pulses Code Devices	1 N/R		5 N/R	14 N/R		5 N/R		1 N/R		11 8704		5 N/R		5 N/R
Part Description Digital, Multivibrator	Test Test Resistance Capacitance	1500 Ohms 100E-12 F	Digital, Multivibrator	1500 Ohms 100E-12 F	1500 Ohms 100E-12 F	Digital, Multivibrator	1500 Ohms 100E-12 F	Digital, Line/Bus Driver	N/R 1500 Ohms 100E-12 F	Digital, Multiplexer	1500 Ohms 100E-12 F	Digital, Multivibrator	1500 Ohms 100E-12 F	Digital, Multiplexer	1500 Ohms 100E-12 F
Part ESO Mfr Class FSC 1	Test Test Test Date Type Resi	392 1086 SS	-	R GN	1186 SS	2	χ 2	2		-	1186 SS	2	NS ~	~	NS ~
Part Mfr FSC	t Te: rce Dai] 	FSC	N/R		FSC	N/R	N/R	N/R	FSC		FSC	N/R	FSC	N/R
(Cont'd)	Test	392		390	736		390		030		436		390		390
Part Number 54121			54122			54123		54128		54150		54151		54153	

Part Number (Con	(Cont'd)	L.		Part Descript	-				Technology	>	ı
54155		ž	^	Digital, Mu	Multiplexer				11.		
	Test	Test	Test	Test Test Test Test Source Date Ivve Desistance	Test Num	Number Date Number Test	r Test Te	Test	Failure Test	st Ger	General
	572	N N N	SS	100 Ohms	N/R	1 N/R	15 FAILED	N/R 15 FAILED 78 INPUT(+) GND(-)	47 186 21 21 21 21 21 21 21 21 21 21 21 21 21	186 Ker	21
54154		N/R	2	Digital, De	Decoder				T.		
	030	X/X	N/R	N/R 1500 Ohms 100E-12	100E-12 F	1 N/R	1 FAILED	2500 N/R	103	252	13
5416		TEX	2	Digital, In	Inverter, Buffer				TTL		
	390	N/R	NS	1500 Ohms	100E-12 F	5 N/R	1 PASSED	2000 S/R	105	247	=
5416		FSC	2		Digital, Inverter, Buffer				11.		
	390	N/R	N	1500 Ohms 100E-12	100E-12 F	S N/R	1 PASSED	2000 s/R	105	247	Ξ
54161		1EX	~	Digital, Cou	Counter/Divider				111		
	390	N/R	ß	1500 Ohms	100E-12 F	5 N/R	1 PASSED	2000 s/R	105	242	Ξ
54174		TEX	2	Digital,	Flip-Flop				TTL		
	390	N/R	S.	1500 Ohms	100E-12 F	S N/R	1 PASSED	2000 S/R	105	242	Ξ
54174		FSC	2	Digital,	Flip-Flop				11		
	390	₹ X	S.	1500 Ohms	100E-12 F	S N/R	1 PASSED	2000 s/R	105	242	Ξ
54175		TEX	~	Digital, Fli	Flip-Flop				111		
	390	N/N	S	\$500 Ohms	100E-12 F	5 N/R	1 PASSED	2000 S/R	105	247	Ξ

Part Number 5427		Part ESD Mfr Clar FSC	ESD Class 2	Part Descript Digital,	ion Gate				<u>Technology</u> TTL	>	1
	Test Source 390	8	t Test e Type GN	Test Test Test Date Type Resistance N/R GN 1500 Ohms	Test Test Num Resistance Capacitance Pul 1500 Ohms 100E-12 F	Number Date Number Pulses Code <u>Devices</u> 5 N/R	er Test Te ces Result Vo 1 PASSED	Number Date Number Test Test Pulses Code Devices Result Voltage Pin Combination 5 N/R 1 PASSED 2000 S/R	Failure Test Criteria Rema 105	rks 247	General Remarks
2427	390	TEX N/R	2 GN	Digital, 1500 Ohms	Gate : 100E-12 F	5 N/R	1 PASSED	2000 S/R	TTL 105	247	Ξ
54273	392	7 =	x 1 1086 SS	Digital, Fl	Flip-flop 100E-12 F	1 N/R	5 FAILED	2000 EACH PIN TO 10 & 20 (+ -)	177.	252	13
5430	390	FSC N/R	S N	Digital, 1500 Ohms	Gate ; 100E-12 F	5 N/R	1 PASSED	2000 S/R	11L 105	242	=
5430	390	TEX N/R	2 8	Digital, Gé 1500 Ohms	Gate : 100E-12 F	5 N/R	1 PASSED	2000 S/R	11L 105	247	11
5437	030	N/R N/R	N/R	Digital, 1500 Ohms	Inverter, Buffer : 100E-12 F	1 N/R	1 FAILED	2500 N/R	11L 103	252	13
2437	390	FSC N/R	2 GN	Digital, 1500 Ohms	Inverter, Buffer ; 100E-12 F	5 N/R	1 PASSED	2000 S/R	TTL 105	247	:
2437	390	TEX N/R	2 ND 1	Digital, 1500 Ohms	Inverter, Buffer : 100E-12 F	S N/R	1 PASSED	2000 S/R	TTL 105	247	=

Part		Part	ESD Class	Part Descripti	G				Vec lookset	2	
5438			.,	Digital,	Gate				111		I
	Tes	t Tes	st Tes	Test Test Test	Test	Number Date Number Test	r Test To	Test	Failure Test	ist Gel	General
	8 8	030 N/R	된 <u>-</u>	N/R 1500 Ohms	Capacitance 100E-12 F	Pulses Code Devices Result 1 N/R 1 FAILED	es Result Vo	Voltage Pin Combination 2500 N/R	Criteria Remarks 103 252	marks Rer 252	Remarks 13
0775		FSC	N	2 Digital, I	Inverter, Buffer				111		
	390	N/R	₹	1500 Ohms	100E-12 F	5 N/R	1 PASSED	2000 s/R	105	247	11
2440		TEX	73	2 bigital, II	Inverter, Buffer				TTL		
	390	N/R	8	1500 Ohms	100E-12 F	5 N/R	1 PASSED	2000 S/R	105	242	=
2442		FSC	2	2 Digital, Decoder	ecoder				111		
	390	N/R	₹	1500 Ohms	100E-12 F	5 N/R	1 PASSED	2000 S/R	105	247	=
2775		N/R	2	Digital, D	ecoder				TIL		
	030	N/R	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	2500 N/R	103	252	13
9775		N/R	2		Digital, Line/Bus Driver				11		
	030	N/R	N/8	1500 Ohms	100E-12 F	1 N/R	1 FAILED	2500 N/R	103	252	13
2450		TEX	2	Digital, Gate	əte				111		
	390	N/R	N _S	1500 Ohms	100E-12 F	5 N/R	1 PASSED	2000 S/R	105	242	‡
5451		TEX	2	Digital, Gate	ste 3				71.		
	390	N/R	3	1500 Ohms	100E-12 F	5 N/R	1 PASSED	2000 S/R	105	242	Ξ

Part		Part	ESD	Part	i.				Technology	>	
5453			2		Gate				<u> </u>		
	Test		t Test	Test Test	Test	Number Date		Fest	Failure Te	Test Ge	General
	Source 390	N/R (S Lyse	1500 Ohms	Resistance Capacitance 1500 Ohms 100E-12 F	Pulses Code 5 N/R	Devices Result v	Result Voltage Pin Combination PASSED 2000 S/R	105 247	247	Kemarks 11
2454		TEX	2	Digital,	Gate				TTL		
	390	N/R	NS		1500 Ohms 100E-12 F	5 N/R	1 PASSED	2000 s/R	105	247	11
2470		TEX	2	Digital,	Flip-Flop				TTL		
	390	N/R	S	1500 Ohm	1500 Ohms 100E-12 F	5 N/R	1 PASSED	2000 S/R	105	247	#
5472		TEX	7	Digital,	Flip-Flop				TTL		
	390	N/R	NS	1500 Ohm	ms 100E-12 F	5 N/R	1 PASSED	2000 S/R	105	247	1
5472		NSC	-	Digital,	Flip-Flop				111		
	436		1186 SS	1500 Ohm	1500 Ohms 100E-12 F	12 N/R	5 FAILED	1600 INPUT TO GND	S	252	ĸ
27.73		NSC	-	Digital,	Flip-Flop				TTL		
	436	8870	SS 83	1500 ОЬт	1500 Ohms 100E-12 F	12 8726	2 FAILED	1500 INPUT TO OUTPUT	50	252	М
	436		0488 SS	1500 Ohm	1500 Ohms 100E-12 F	7 8726	2 FAILED	800 INPUT TO COMMON	S	252	M
5473		TEX	2	Digital,	Flip-Flop				Ħ		
	390	N/R	S	1500 Ohm	1500 Ohms 100E-12 F	5 N/R	1 PASSED	2000 S/R	105	242	11

Part Number 5474		Part ESD Mfr Cla	ESD Class	Part Descript Digital,	ion Flip-Flop				TTL	XE	
	Test	t Tesi	Test Test Test Date Type Resi	. Test Resistance	Test Test Resistance Capacitance	Number Date Number Test Dulses Code Devises Besui	umber Test T	Date Number Test Test	Failure Test	est Ger	General
	390	390 N/R (3	1500 Ohms	100E-12 F	5 N/R	1 PASSED	2000 S/R	105 247	247	11
7275		TEX	2	Digital, :	:lip-Flop				77.		
	390	N/R	N.	1500 Ohms 100E-12	100E-12 F	5 N/R	1 PASSED	2000 s/R	105	247	=
2476		NSC	-	Digital, F	Flip-Flop				TTL		
	392	1086	s ss	1500 Ohms	100E-12 F	1 N/R	S FAILED	2000 EACH PIN TO 5 & 13 (+ -)	19	252	13
5476		TEX	2	Digital,	Flip-Flop				11.		
	390	N/R	S	1500 Ohms	100E-12 F	5 N/R	1 PASSED	2000 S/R	105	247	=
5483		Z/R	m	Digital, E	Error Detect/Correct, Parity/Carry Gen	orrect, Parity	//Carry Gen		TTL		
	545	N/R	SS	100 Ohms	N/R	1 N/R	15 FAILED	65 INPUT(+) GND(-)	27	186	21
5483		TEX	2	Digital,	Error Detect/Correct, Parity/Carry Gen	orrect, Parity	/Carry Gen		TTL		
	390	A/R	₩.	1500 Ohms	100E-12 F	5 N/R	1 PASSED	2000 S/R	105	247	1
2483		FSC	2	Digital,	Error Detect/Correct, Parity/Carry Gen	orrect, Parity	/Carry Gen		111		
	390	X/X	S.	1500 Ohms	100E-12 F	5 N/R	1 PASSED	2000 S/R	105	247	1
2486		FSC	2	Digital, Ga	Gate				111		
	390	N/R	S S	1500 Ohms	100 E -12 F	S N/R	1 PASSED	2000 S/R	105	247	Ξ

	General <u>Remarks</u> 11	13	13	13	13	13	13	13
	ks 747	252	252	252	252	194	252	252
Technology 11L	Failure Test Criteria Remar 105	CMOS 102	CMOS 102	CMOS 102	CMOS 162	CMOS 102	CMOS 102	CMOS 102
	Test Voltage Pin Combination 2000 S/R	2000 2(INPUT) 7(GND)	2000 3(INPUT) 14(VCC)	4000 11(INPUT) 10(OUTPUT)	4000 1(INPUT) 3(OUTPUT)	2250 N/R	2500 2(INPUT) 8(GND)	3000 6(INPUT) 8(GND)
į	Test Result PASSED	4 FAILED	4 FAILED	2 FAILED	3 FAILED	1 FAILED	2 FAILED	4 FAILED
	Number Date Number Pulses Code Devices 5 N/R	1 N/R	1 N/R	1 N/R	1 N/R	tt Trigger 1 N/R	1 N/R	1 N/R
Part <u>Description</u> Digital, Gate	Test Test Resistance Capacitance 1500 Ohms 100E-12 F	Digital, Gate 1500 Ohms 100E-12 F	Digital, Gate 1500 Ohms 100E-12 F	Digital, Inverter, Buffer 1500 Ohms 100E-12 F	Digital, Gate 1500 Ohms 100E-12 F	Digital, Inverter, Schmitt Trigger 1500 Ohms 100E-12 F 1 N/R	Digital, Multiplexer 1500 Ohms 100E-12 F	Digital, Counter/Divider 1500 Ohms 100E-12 F
Part ESD Mfr Class TEX 2	Test Se Date N/R	NSC 1	NSC 1	NSC 2 0285 SS	NSC 2	NSC 2	NSC 2	NSC 2 0385 SS
(Cont'd)	Source 390	393	393	393	393	393	393	393
Part Number 5486		24000	24005	24004	97008	54014	54C157	540163

Part Number S40164		Part ESD Mfr Clas	SI v	Part Description Digital per	on	chi f		1470				Technology	дб	1
		200	7		kegister, smirt	11100						SOE E		
	Test	Test	Test	Test		NCAL S	Number Date Number Test	ber Test T	Test			Failure 1		General
	39	7860	SS	SS 1500 Ohms	100E - 12	F Fuce ruce	1 N/R 2 FAILED	2 FAILED	2500	2500 8(INPUT) 7(GND)		102 252		Kemarks 13
54C174		JSN	2	Digital,	Flip-Flop							SOWO		
	393	SS 5870		1500 Ohms	100E-12	u.	1 N/2	2 FAILED	2500	2500 1(INPUT) 15(VCC)	15(VCC)	102	252	13
540193		NSC	-	Digital,	Counter/Divider	vider						CMOS		
	393	0385	SS	1500 Ohms	100E - 12	LL.	1 N/R	2 FAILED	1500	1500 9(INPUT) 16(VCC)	(ACC)	102	252	13
54030		NSC	2	Digital,	Gate							CMOS		
	393	0285 SS		1500 Ohms	100E-12 F	u.	1 N/R	4 FAILED	3000	3000 1(INPUT) 7(GND)	(GND)	102	252	13
27075		NSC	-	Digital, (Decoder							CMOS		
	393	0984 SS		1500 Ohms	100E-12	L L.	1 N/R	2 FAILED	1500	1500 12(INPUT) 8(GND)	8(GND)	,05	252	13
54C52		NSC	-	Digital, I	Line/Bus Driver	river						CMOS		
	393	0882	SS	1500 Ohms	100E-12	ш.	1 N/R	1 FAILED	400 N/R	N/R		102	252	13
54074		NSC	2 [Digital, i	flip-Flop							CMOS		
	393	0285 SS		1500 Ohms	100E-12	<u>u_</u>	1 N/R	4 FAILED	3000	3000 12(INPUT) 8(OUTPUT)	8(OUTPUT)	102	252	13
94076		NSC	2	Digita!,	Flip-Flop							CMOS		
	393	0385 SS		1500 Ohms	100E-12	u.	1 N/R	2 FAILED	7000	4000 4(INPUT) 5(VCC)	(000)	102	252	13

Part										
Number 54C83		MFC CLass	Descrip Digital	gion , Gate				Technology CMOS	2	1
	Test Source 393	Test Tes Ce Date IYP 0385 SS	Test Test <u>Type Resistance</u> SS 1500 Ohms	Jest <u>Capacitance</u> 100E-12 F	Number Date Number Test Pulses Code Device; Resul	+J O	Voltage Pin Combination 2500 4(INPUT) 5(VCC)	Failure Test General Criteria Remarks Remarks 102 252 13	Test Ge Remarks Re 252	General Remarks 13
24085		NSC 1	Linear, Co	Comparator				SOMO		
	393	0385 SS	1500 Ohms 100E-12	100E-12 F	1 N/R	2 FAILED	2000 1(INPUT) 8(GND)	102	252	13
540901		NSC 1		Digital, Inverter, Buffer	r			SOWO		
	393	0285 \$\$	1500 Ohms 100E-12	100E-12 F	1 N/R	3 FAILED	2000 4(INPUT) 7(GND)	102	252	13
54C905		NSC 1	Digital	, Inverter, Buffer	,			SOMO		
	393	0285 SS	1500 Ohms	100E-12 F	1 N/R	2 FAILED	2000 2(INPUT) 1(OUTPUT)	102	252	13
	927	1186 SS	1500 Ohms	100E-12 F	5 N/R	2 FAILED	600 INPUT TO OUTPUT	\$	252	₩.
906375		NSC 2	Digital	, Inverter, Buffer				SOWO		
	393	0285 SS	1500 Ohms	100E-12 F	1 N/R	2 FAILED	3000 4(INPUT) 3(OUTPUT)	102	Ç:2	٤٠
276375		NSC 1	Digital, E	, Encoder				SOWO		
	393	0181 SS	1500 Ohms	1500 Ohms 100E-12 F	1 N/R	1 FAILED	2000 N/R	102	252	13
54600		S1G 1	Digital	, Gate				Advanced STTL	STTL	
	436	SS 8890	1500 Ohms	1500 Ohms 100E-12 F	12 8741	5 FAILED	1500 INPUT TO OUTPUT	5	252	~

1	General Remarks	3	13		8		13	ммм		13	m		13		13
X STTL			252	STTL	252	STTL	252	252 252 252	STTL	252	252	STTL	252	STTL	252
Technology Advanced STTL	Failure Test Criteria Remarks	5	102	Advanced STTL	2	Advanced STTL	102	20 20	Advanced SIIL	102	2	Advanced STTL	102	Advanced STTL	102
	Test Vo(tage Pin Combination	800 INPUT TO GROUND	2000 1(INPUT) 7(GND)		800 INPUT TO OUTPUT		1000 8(INPUT) 10(OUTPUT)	800 INPUT TO OUTPUT 800 INPUT TO GND 800 INPUT TO OUTPUT		1500 9(INPUT) 7(GND)	1400 VCC TO INPUT		500 10(INPUT) 7(GND)		200 10(INPUT) 7(GND)
			1 FAILED		5 FAILED		1 FAILED	5 FAILED 5 FAILED 5 FAILED		1 FAILED	1 FAILED		2 FAILED		1 FAILED
	Number Date Number Test Pu(ses Code Devices Resu	N/R	1 N/R		7 8737		1 N/R	7 N/R	5	1 N/R	11 N/R		1 N/R		1 N/R
Part Description Digital, Gate	Test Test Resistance Capacitance	1500 Ohms 100E-12 F	1500 Ohms 100E-12 F	Digital, Gate	1500 Ohms 100E-12 F	Digital, Gate	1500 Ohms 100E-12 F	1500 Ohms 100£-12 F	Digital, Inverter, Buffer	1500 Ohms 100E-12 F	1500 Ohms 100E-12 F	Digital, Gate	1500 Ohms 100E-12 F	Digital, Gate	1500 Ohms 100E-12 F
Part ESD Mfr Class FSC 1	Test Test Date Type	0788 SS	0784 SS	816 1	0788 SS	FSC 1	0784 SS	1186 SS	FSC 1	0784 SS	1186 SS	FSC 1	0984 SS	FSC 1	SS 7860
(Contid)	Test	739	393		927		393	436		393	736		393		393
Part Number S4F00				54F02		54F02			54F04			54508		54F11	

Part Number 54F138		Part ESD Mfr Class FSC 1	Part Descripti Digital,	Decoder				Technology Advanced STTL	STTL	1
	Test Source 393	Test Test Test Test Source Date Type Resistanc 393 0784 SS 1500 Ohms	t Test <u>e Resistance</u> 1500 Ohms	Test <u>Capacitance</u> 100E-12 F	Number Date Number Pulses Code Devices 1 N/R	Test Result FAILED	Voltage Pin Combination 2500 N/R	Failure Te Criteria Re 102	Test Ger Remarks Rem 252	General Remarks 13
	136	1186 SS	1500 Ohms	100E-12 F	14 N/R	5 FAILED	2000 INFUT TO GND	\$	252	23
	736	1186 SS	1500 Ohms	100E-12 F	10 N/R	5 FAILED	1200 INFUT TO GND	5	252	M
	436	1186 SS	1500 Ohms	100E-12 F	9 N/R	5 FAILED	1000 INPUT TO OUTPUT	2	252	23
	736	1186 SS	1500 Ohms	100E-12 F	17 N/R	5 FAILED	3500 OUTPUT TO GND	5	252	٣
	436	1186 SS	1500 Ohms	100E-12 F	9 N/R	5 FAILED	1000 INPUT TO GND	5	252	M
	436	1186 SS	1500 Ohms	100E-12 F	7 N/R	5 FAILED	800 INFUT TO GND	2	252	~
	927	1186 SS	1500 Ohms	1(.0E-12 F	9 N/R	5 FAILED	1000 INPUT TO OUTPUT	2	252	M
	436	1186 SS	1500 Ohms	100E-12 F	7 N/R	5 FAILED	800 INPUT TO GND	5	252	~
54F138		516 1	Digital, De	Decoder				Advanced	STTL	
	927	1186 SS	1500 Ohms	100E-12 F	12 N/R	5 FAILED	1500 INPUT TO GND	\$	252	٣
	736	1186 SS	1500 Ohms	100E-12 F	9 N/R	S FAILED S FAILED	1000 INPUT TO GND 1000 INPUT TO GND	2 2	252	mm
	736	1186 SS	1500 Ohms	100E-12 F	10 N/R	5 FAILED	1200 INPUT TO OUTPUT	5	252	8
54F153		fSC 2	Digital,	Multiplexer				Advanced	STTL	
	393	0184 SS	1500 Ohms	100E-12 F	1 N/R	1 FAILED	2500 6(INPUT) 8(GND)	102	252	13
54F163		FSC 1	Digital, Co	Counter/Divider	,			Advanced	STTL	
	393	0284 SS	1500 Ohms	100E-12 F	1 N/R	1 FAILED	2000 5(INPUT) 8(GND)	102	252	13

Part Numbe∵ S∓F132		Part ESD Mfr Class FSC 1	Part <u>Descripti</u> Digital,	on Arithmetic, Carry Generator	Generator			Technology Advanced SITL	97 STTL	1
	Sour 393	Test Test Test Test Source Date Type Resi: 393 0284 SS 1500	it Test Resistance 1500 Ohms	Test <u>Capacitance</u> 100E-12 F	Number Date Number Test Pulses Code Devices Resul	er Test To	Date Number Test Test <u>Code Devices Result Voltage Pin Combination</u> N/R 1 FAILED 2000 N/R	Failure Test Criteria Remarks	est Ger emarks Ren	General <u>Remarks</u>
54F194		FSC 2	2 Digital, Re	Register, Shift				Advanced STTL	STTL	2
	393	s 0184 ss	1500 Ohms	100E-12 F	1 N/R	1 FAILED	3000 1(INPUT) 8(GND)	102	252	13
54F20		FSC 1	Digital, Ga	Gate				Advanc 3d STTL	STTL	
	736	1186 SS	1500 Ohms	100E-12 F	12 N/R	1 FAILED	1600 INPUT TO GND	2	252	8
	736	1186 SS	1500 Ohms	100E-12 F	7 N/R	5 FAILED	800 INPUT TO GND	5	252	m
54F21		FSC 3	Digital,	Gate				Advanced STTL	STTL	
	436	1186 SS	1500 Ohms	100E-12 F	18 8617	1 PASSED	4000 N/R	5	252	٣
54F240		FSC 2	Digital, I	nverter, Buffer				Advanced STTL	STTL	
	393	0284 SS	1500 Ohms	100E-12 F	1 N/R	1 FAILED	3000 15(IMPUT) 10(GND)	102	252	13
54F244		FSC 1	Digital, I	nverter, Buffer				Advanced STTL	STTL	
	393	0784 SS	1500 Ohms	100E-12 F	1 8348	1 FAILED	350 8(INPUT) 10(GND)	102	252	13
54F253		FSC 1	Digital, Multiplexer	ltiplexer				Advanced STTL	STTL	
	393	0984 SS	1500 Ohms	100E-12 F	1 8338	1 FA'LED	750 11(INPUT) 8(GND)	102	252	13

2002 2002 2003 2003		SSE . 0 . 388	Fart 2000/101/07 2001/04/03	0316				Technology Advanced STTL	STTL	1
	80 00 00 00 00 00 00 00 00 00 00 00 00 0	7851 'est 0318 'ype 186 85	7est Resistance 1500 Orms	Test Capacitance 100E/12 F	Number Date Number Pulses Code Devices 10 9534	Result FAILED	Voltage Pin Combination (200 :NPUT TO GND	Faiture Test Criteria Remai	Test General Remarks Remarks 252 3	rai 3
(1) (1) (1)			a; e;	۵) در				Advanced	SITL	
	9	\$ 88 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	8 to 00 kg	u N T U E) O	8 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	TEATLED TEATLED	1500 + 1NPUT TO - OUTPUT 1500 INPUT TO GROUND	ις (v	252	мм
(1) (1) (1) (2)			eg ('e), 6;0	⊕ ••				Advanced SIIL	STTL	
	353	SS *8e?	ST40 005.	100E-12		FA'LED	1500 9(INPUT) 7(GND)	105	252	13
	.35	85 55	4500 Chas	3 Z\$ -3C).	·3 k/R	5 FAILED	1800 :NPUT TO GND	ľ	252	٣
	, Q	1.86.55	*523 Onns	a 2,-300;	α/z	S FAILED	1400 INPUT TO GND	55	252	M
65 10 10 10 10 10 10 10 10 10 10 10 10 10		· ·	Digital, Ga	a c c				Advanced	STTL	
	ro O	85	\$7.5 Ctrs	2 	er F	S *A:LED	1430 INPUT TO SND	5	252	٣
5373		· .	D:9:ta:, _a	# C +				Advanced STTL	STTL	
	0	588 88	*533 Ohms	1005-12 F	S W/R	5 FAILED	500 INPUT TO OUTPUT	\$	252	٣
	393	33 +85	1500 Ohms	120E-12 F	α 2	FALLED	530 14(IMPUT) 20(3ND)	102	252	13
	+35	\$\$ 98	1530 Ohms	130E-12 F	8/18	5 FAILED	1000 IMPUT TO GND	2	252	m
	-35	1186 85	.500 Onms	100E-12 F	8/8	5 PASSED	4000 W/R	\$	252	м
	-35	:36 SS	1500 Ohms	*335-12 F	8 N/R	5 FAILED	900 INPUT TO GND	2	252	٣

ļ	General <u>Remarks</u> 3	мм	м	8	٣		13		ммм	m	٣	٣	٣	3	м
STTL	Test (Remarks F	252 252	252	252	252	STTL	252	STTL	252 252 252	252	252	252	252	252	252
Technology Advanced STIL	Failure To Criteria Re	.	2	5	\$	Advanced STTL	102	Advanced STIL	<i>γ</i> . <i>γ</i> . <i>γ</i> .	5	5	5	2	2	25
	Voltage Pin Combination 600 INPUT TO GND	800 INPUT TO GND 800 INPUT TO OUTPUT	1500 INPUT TO GND	4000 N/R	800 INPUT TO GND		3000 4:INPUT) 10(GND)		1000 1NPUT TO GND 1000 1NPUT TO GND 1000 1NPUT TO GND	800 INPUT TO GND	400 INFUT TO GND	1400 INPUT TO GND	1000 INPUT TO GND	600 INPUT TO OUTPUT	4000 N/R
	Test Result FAILED	5 FAILED 5 FAILED	5 FAILED	5 PASSED	5 FAILED		1 FAILED		5 FAILED 1 FAILED 5 FAILED	5 FAILED	1 FAILED	5 FAILED	5 FAILED	5 FAILED	5 PASSED
	Number Date Number Pulses Code Devices 5 N/R 5	7 N/R	12 N/R	18 N/R	7 N/R		1 N/R		9 8551	7 8551	3 8551	11 8551	9 8551	5 8551	18 8551
on Latch	Test Capacitance 100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	lip-Flop	100E-12 F	nparator	130E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F
Part <u>Descripti</u> Digital,	Test Test Test Oate Type Resistance 1186 SS 1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	Digital, Flip-Flop	1500 Ohms	Linear, Comparator	1500 c.ms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms
Part ESD Mir Class FSC 1		1186 SS	1186 SS	1186 SS	1186 SS	FSC 2	0284 SS	FSC 1	1186 SS	1186 SS	1186 SS	1186 SS	1186 SS	1186 SS	1186 SS
(Cont'd)	Test Source 436	436	436	739	736		393		736	436	736	736	736	736	739
Part Number 546373						54.63.74		54F521							

Part Number			ESD	Part Description	č				Technology	>	
54F64		FSC	~	Digital, G	Gate				Advanced STTL	STTL	[
	Source 393	Fest e Date 0184	Type Resi	Source Date Type Resistance 393 0184 SS 1500 Ohms	Test <u>Capacitance</u> 100E-12 F	Number Date Number Pulses Code Devices 1 N/R 1	Date Number Test Code Devices Result N/R 1 FAILED	Voltage Pin Combination 2500 11(IMPUT) 7(GND)	Failure Test Criteria Remarks 102 252		General Remarks 13
54674		FSC	 -	Digital, F	Flip-Flop				Advanced STTL	STTL	
	393	0984 SS		1500 ohms	100E-12 F	1 N/R	1 FAILED	400 4(INPUT) 7(GND)	102	252	13
	736	1186 SS	SS	1500 Ohms	100E-12 F	6 N/R	5 FAILED 5 FAILED	700 INPUT TO OUTPUT 700 INPUT TO GND	₹. ₹.	252 252	юм
	436	1186 SS	SS	1500 Ohms	100E-12 F	4 N/R	5 FAILED	500 INPUT TO GND	S	252	٣
	736	1186	SS	1500 Ohms	100E-12 F	3 N/R	1 FAILED	400 INPUT TO GND	5	252	8
	736	1186 SS		1500 Ohms	100E-12 F	9 N/R	5 FAILED 5 FAILED	1000 INPUT TO GND 1000 INPUT TO GND	v v	252 252	мм
54.674	•,	918	-	Digital, F	flip-flop				Advanced S	STTL	
	736	1186 SS		1500 Ohms	100E-12 F	10 N/R	5 FAILED	1200 INPUT TO GND	s	252	3
	436	1186 SS		1500 Ohms	100E-12 F	12 N/R	5 FAILED	1600 INPUT TO OUTPUT	\$	252	2
	436	1186	SS	1j00 Ohms	100E-12 F	18 N/R	5 PASSED	400C N/R	\$	252	~
	436	1186 SS		1500 Ohms	100E-12 F	7 N/R	5 FAILED	800 INPUT TO GND	\$	252	3
	736	1186	SS	1500 Ohms	100E-12 F	12 N/R	1 FAILED	1600 INPUT TO GND	5	252	3
	436	1186	SS	1500 Ohms	100E-12 F	13 N/R	5 FAILED	1800 INPUT TO OUTPUT	\$	252	3
	436	1186 SS		1500 Ohms	100E-12 F	10 N/R	1 FAILED	1200 INPUT TO OUTPUT	2	252	~

	General <u>Remarks</u> 3		=	21		=		11		11		ĸ		Ξ
IY STTL			242	186		242		242		242		252		242
Technology Advanced STTL	Failure Test Criteria Remarks 5 252	HTTL	105	HTTL 47	HTTL	105	HTTL	105	HTTL	105	HTTL	5	HTTL	105
	Test Voltage Pin Combination 1200 INPUT		2000 S/R	93 INPUT(+) GND(-)		2000 S/R		2000 S/R		2000 S/R		2000 INPUT TO GND		2000 S/R
	e Number Test <u>Pevices Result</u> 5 FAILED		1 PASSED	15 FAILED		1 PASSED		1 PASSED		1 PASSED		2 FAILED		1 PASSED
	mber Datelses Code		S N/R	1 N/R		5 N/R		5 N/R		5 N/R		14 N/R		5 N/R
Part Description Digital, Flip-Flop	Test <u>Stance Capacitance</u> Ohms 100E-12 F	Digital, Gate	1500 Ohms 100E-12 F	Digital, Gate 100 Ohms N/R	Digital, Gate	1500 Ohms 100E-12 F	Digital, Inverter, Buffer	1500 Ohms 100E-12 F	Digital, Inverter, Buffer	1500 Ohms 100E-12 F	Digital, Inverter, Buffer	1500 Ohms 100E-12 F	Digital, Gate	1500 Ohms 100E-12 F
ESD Class	Test Test Test Date Type Resis 1186 SS 1500	~	<u>&</u>	s ss	C 1	ß	2	N _O	2	NS.	-	1186 SS	2	S
Part Mfc SIG	it Tex	FSC		N/R N/R	1EX	N/R	TEX	N/R	FSC	N/R	RCA		TEX	N/R
(Cont'd)	Test <u>Source</u> 436		390	572		390		390		390		436		390
Pant Number S+F74		54400	;	54H00	54H01		54H04		54404		54H04		54410	

Part Number (C 54H10	(Cont'd)	Part ESD Mfr Cla	ESD Class 2	Part <u>Description</u> Digital, Gat	ion Gate				Technology HTTL		l
	Test Source 390	Test Se Date N/R	Test Test Test Date Type Resi N/R GN 1500	Test Resistance 1500 Ohms	Source Date Type Resistance Capacitance Pulses 390 N/R GN 1500 Ohms 100E-12 F 5	Number Date Number Test Pulses Code Devices Resul	ber Test Te ices Result Vo 1 PASSED	Date Number Test Test <u>Code Devices Result Voltage Pin Combination</u> N/R 1 PASSED 2000 S/R	Failure Test Criteria Remarks 105 247	st General <u>marks</u> <u>Remarks</u> 247	eral 11
54H183		X /R	M	Digital, A	Arithmetic, Adder, Full	r, Full			HTTL		
	542	N/R	SS	100 Ohms N/R	N/R	1 N/R	15 FAILED	98 INPUT(+) GND(-)	27	186	21
54H20		TEX	2	Digital,	Gate				'n		
	390	N/R	Š	1500 Ohms	100E-12 F	5 N/R	1 PASSED	2000 s/R	105	242	=
54H20		FSC	2	Digital,	Gate				HTTL		
	390	N N	S	1500 Ohms	100E-12 F	5 N/R	1 PASSED	2000 S/R	105	242	1
54H30		FSC	2	Digital, G	Gate				HTTL		
	390	N/R	S	1500 Ohms 100E-12 F	100E-12 F	5 N/R	1 PASSED	2000 S/R	105	242	=
54440		TEX	~	Digital,	Inverter, Buffer				HTTL		
	390	N/R	S.	1500 Ohms	100E-12 F	S N/R	1 PASSED	2000 S/R	105	242	=
54H76		TEX	2	Digital, F	flip-flop				HTTL		
	390	N/R	8	1500 Ohms 100E-12 F	100E-12 F	S N/R	1 PASSED	2000 S/R	105	247	=
54HC00		₹	-	Digital, G	Gate				NWOS		
	397	X/R	SS	1500 Ohms	1500 Ohms 100E-12 F	5 N/R	10 FAILED	1800 INPUT TO GND (+ -)	54	252	7

İ	General Remarks 7 7 7 7 7 7	7			~~~~		~ ~ ~ ~ ~		M
	52 52 52 55 55 55 55 55 55 55 55 55 55 5	252	252 252 252 252		252 252 252 252 252		252 252 252 252 252		252
Technology	Failure Test — <u>Criteria Remar</u> 54 2 54 2 102 2	HMOS 54	54 54 102 102	SOWH	54 54 54 102 102	HMOS	102 54 54 102 102	HMOS	ß
	Voltage Pin Combination 3/00 OUTPUT TO GND (+ -) 2100 IN VUT TO OUTPUT (+ -) 9000 VC; TO GND (+ -) 9000 GND TO VCC (+ -)	2800 INPUT TO GND (+ -)	6125 OUTPUT TO GND (+ ·) 2050 INPUT TO OUTPUT (+ ·) 9000 VCC TO GND (+ ·) 9000 GND TO VCC (+ ·)		3100 INPUT TO GND (+ -) 5300 OUTPUT TO GND (+ -) 2500 INPUT TO OUTPUT (+ -) 9000 VCC TO GND (+ -) 9000 GND TO VCC (+ -)		9000 INPUT TO GND (+ -) 5800 OUTPUT TO GND (+ -) 2500 INPUT TO OUTPUT (+ -) 9000 VCC TO GND (+ -) 9000 GND TO VCC (+ -)		1600 OUTPUT TO GND
	비용 요 요 요	10 FAILED	10 FAILED 10 PASSED 10 PASSED		10 FAILED 10 FAILED 10 FAILED 10 PASSED 10 PASSED		10 PASSED 10 FAILED 10 FAILED 10 PASSED		2 FAILED
	Number Date Pulses Code 5 N/R	1 N/R	S N/R		5 N/R		5 N/R	e.	12 8648
Part <u>Description</u> Digital, Gate	Test Test Test Test Test Source Date Type Resistance Capacitance 397 N/R SS 1500 Ohms 100E-12 F	Digital, Gate 1500 Ohms 100E-12 F	1500 Ohms 100E-12 F	Digital, Gate	1500 Ohms 100E-12 F	Digital, Gate	1500 Ohms 100E-12 F	Digital, Inverter, Buffer	1500 Ohms 100E-12 F
ESD Class	Test Test Test Date Type Resid N/R SS 1500	ss SS	SS	2	SS	~	SS	-	
Part ESD Mfr Clas	Test N/R N/R	RCA N/R	N/R	NSC	X X	TEX	X/R	TEX	1186 SS
(Cont'd)	Test Source 397	397	397		397		397		739
Part Number S4HC00		54HC00		54HC00		54HC00		54HC04	

Part Number 54HC14		Part ESD Mfr Class NSC 1	Part Descript Digital,	ion Inverter, Buffer				Technology HMOS		l
	Fest Source 436	r Test Test Test ce Date Type Resi 1186 SS 1500	rt Test Resistance 1500 Ohms	Test Capacitance 100E-12 F	Number Date Number Test Pulses Code Devices Resu 9 8627 1 FAILE	r Jest Te es Result Vo 1 FAILED	Test Test Result Voltage Pin Combination FAILED 1000 INPUT TO OUTPUT	Failure Test <u>Criteria Remar</u> 5	7ks	General <u>Remarks</u> 3
54HC161		TEX 1	Digital, Co	Counter/Divider				HMOS		
	436	1186 SS	1500 Ohms	100E-12 F	2 8535	2 FAILED	300 INPUT TO OUTPUT	ι	252	m
	736	1186 SS	1500 Ohms	100E-12 F	15 8535	1 FAILED	2500 INPUT TO OUTPUT	S	252	2
54HC390		MOT 1	Digital, Co	Counter/Divider				HMOS		
	736	1186 SS	1500 Ohms	100E-12 F	10 8703	1 FAILED	1200 INPUT TO GND	5	252	м
54HC42		MOT 1	Digital, Do	Decoder				HMOS		
	927	0588 SS	1500 Ohms	100E-12 F	12 N/R	2 FAILED	1500 INPUT TO COMMON	ľ	252	m
	736	0588 ss	1500 Ohms	100E-12 F	9 N/R	2 FAILED	1000 INPUT TO OUTPUT	ιΛ	252	m
	736	1186 SS	1500 Ohms	100E-12 F	9 N/R	2 FAILED	1000 INPUT TO GND	25	252	m
54103		NSC 1	Digital, G	Gate				רדונ		
	927	1186 SS	1500 Ohms 100E-12	100E-12 F	11 N/R	2 FAILED	1400 INPUT TO GND	۲.	252	м
54104		N/R 2	Digital,	Inverter, Buffer				1111		
	361	N/R GN	1500 Ohms	100E-12 F	200 N/R	11 PASSED	2000 GND.(1)(+; IN.(7)(-)	78	252	13
	362	N/R GN	1500 Ohms	100E-12 F	200 N/R	1 PASSED	2250 GND.(1)(+) IN.(7)(-)	78	252	5

ļ	General Remarks 13	13	13	13	13	13	13	13	13	£1	13	13	13	13	13 13	13
, de	Test G Remarks Ri 252	252	77	77	92	92	92	7.7	92	76 252	252	252	92	92	252 77 76	92
Technology	Failure To Criteria Ro	78	59	59	75	75	75	59	75	78	78	78	75	75	78 29 42	75
	Voltage Pin Combination 2500 GND.(1)(+) IN.(7)(-)	2500 GND.(1)(+) IN.(7)(-)	2750 GND.(1)(+) IN.(7)(-)	2750 GND.(1)(+) IN.(7)(-)	2750 GND.(1)(+) IN.(7)(-)	2750 GND.(1)(+) IN.(7)(-)	2750 GND.(1)(+) IN.(7)(-)	2750 GND.(1)(+) IN.(7)(-)	2750 GND.(1)(+) IN.(7)(-)	2750 GND.(1)(+) IN.(7)(-) 2750 GND.(1)(+) IN.(7)(-	2750 GND.(1)(+) IN.(7)(-)	3000 GND.(1)(+) IN.(7)(-)	3000 GND.(1)(+) IN.(7)(-)	3250 GND.(1)(+) IN.(7)(-)	3500 GND.(1)(+) IN.(7)(-) 3500 GND.(1)(+) IN.(7)(-) 3500 GND.(1)(+) IN.(7)(-)	3500 GND.(1)(+) IN.(7)(-)
	Date Number Test T Code Devices Result V N/R 1 FAILED	1 PASSED	1 FAILED	1 FAILED 1 PASSED	11 PASSED	1 PASSED	1 FAILED	1 FAILED	4 FAILED 2 FAILED 6 FAILED	2 FAILED						
fer	Number Date Pulses Code 10 N/R	200 N/R	1 N/R	3 N/R	5 N/R	8 N/R	50 N/R	75 N/R	125 N/R	175 N/R	200 N/R	200 N/R	5 N/R	10 N/R	1 N/R	4 N/R
on Inverter, Buffer	Test <u>Capacitance</u> 100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F
Part Description Digital, In	Test Test Test Date Type Resistance N/R GN 1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms
ESD Class 2	Test Type GN	Š	3	S.	8	Š	S.	Š	N S	S.	Š	Š	Š	Š	S	3
Part ESD Mfr Clas		N/R	X X	X R	N/N	N/N	X X	N/N	N/R	X X	N/R	X X	Z/R	N/R	χ χ	N/R
(Cont'd)	Test Source 363	363	364	364	364	364	364	364	364	364	364	365	365	366	367	367

		General	76 13	13	13	13	<u>τ</u> τ	13	13	5	13	51	13	13	13	13	13	5	13	13	51	13	13
≥		Test	2/2	252	252	252	÷ %	252	252	92	252	77	11	252	7.7	252	92	252	92	252	12	252	26
Technology	1111	Failure Te	42	78	78	78	2 7	78	78	75	78	29	59	78	59	78	75	78	75	78	58	78	75
		Test	3500 GND.(1)(+) IN.(7)(-)	3500 GND.(1)(+) IN.(7)(-)	3500 GND.(1)(+) IN.(7)(-)	4000 GND.(1)(+) IN.(7)(-)	4000 GND.(1)(+) IN.(7)(-)	4000 GND.(1)(+) IN.(7)(-)	4000 GND.(1)(+) IN.(7)(-)	4250 GND.(1)(+) IN.(7)(-)		4250 GND.(1)(+) IN.(7)(-)	4250 GND.(1)(+) IN.(7)(-)	4250 GND.(1)(+) IN.(7)(-)	4500 GND.(1)(+) IN.(7)(-)	4500 GND.(1)(+) IN.(7)(-)	4500 GND.(1)(+) IN.(7)(-)	4500 GND.(1)(+) IN.(7)(-)	5000 GND.(1)(+) IN.(7)(-)				
		Test	1 FAILED	1 FAILED	8 PASSED	2 FAILED	4 FAILED 7 FAILED	1 FAILED	8 PASSED			5 FAILED	1 FAILED	3 PASSED	2 FAILED			3 PASSED	7 HAILED	5 'AILED	4 FAILED	1 FAILED	1 FAILED
	fer	Number Date	Putses Code 8 N/R	25 N/R	200 N/R	1 N/R		50 N/R	1 N/R	1 N/R			8 N/R	200 N/R	1 N/R				1 N/R			2 N/R	6 N/R
C	, Inverter, Buffer		100E-12 F	100E-12 F	100E-12 F	100E-12 F		100E-12 F	100E-12 F	100E-12 F			100E-12 F	100E-12 F	100E-12 F				100E-12 F			100E-12 F	100E-12 F
Part Description	Digital, I	Test Test Test	N/R GN 1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms		1500 Ohms	1500 Ohms	1500 Ohms			1500 Ohms	1500 Ohms	1500 Ohms				1500 Ohms			1500 Ohms	1500 Ohms
ESD Class	2	Test	S S	Š	S	N.		S	8	S			8	S	ß				N.			S	S.
Part ESD Mfr Cla		Test	N/R	N/R	N/R	N/R		N/R	N/N	X/R			Z/R	N/R	X X				N/R			N/R	N/R
P (Cont'd)	1	Test	367	367	367	368		368	368	369			369	369	370				371			371	371

	General	Remarks 13	13	13	13	£1 £1	13	13	13	13	13	13	13	13	13	13		21
		2 ks	9/	252 252	252	76 77 252	252	252	252	252	252	252	252	252	252	252		186
<u>Technology</u> LITL	failure Test	Criteria Rer 42	75	78 78	78	42 29 78	78	78	2/8	78	78	78	78	78	78	78	וזדו	27
	Test	Voltage Pin Combination 5000 GND.(1)(+) IN.(7)(-)	5000 GND.(1)(+) IN.(7)(-)	5030 GND.(1)(+) IN.(7)(-) 5000 GND.(1)(+) IN.(7)(-)	5500 GND.(1)(+) iN.(7)(-)	5750 GND.(1)(+) IN.(7)(-) 5750 GND.(1)(+) IN.(7)(-) 5750 GND.(1)(+) IN.(7)(-)	6000 GND.(1)(+) IN.(7)(-)	6000 GND.(1)(+) IN.(7)(-)	6500 GND.(1)(+) IN.(7)(-)	6500 GND.(1)(+) IN.(7)(-)	7000 GND.(1)(+) IN.(7)(-)	7000 GND.(1)(+) IN.(7)(-)	7000 GND.(1)(+) IN.(7)(-)	7200 GND.(1)(+) IN.(7)(-)	7500 GND.(1)(+) IN.(7)(-)	8000 GND.(1)(+) IN.(7)(-)		77 INPUT(+) GND(-)
	Date Number Test T	ي ا⊶	1 FAILED	1 FAILED 4 PASSED	1 FAILED	3 FAILED 3 FAILED 4 FAILED	1 FAILED	1 FAILED	1 FAILED	1 FAILED	1 FAILED	1 FAILED	1 FAILED	1 FAILED	1 FAILED	1 FALLED		15 FAILED
ē	Number Date	Pulses Code	175 N/R	200 N/R	200 N/R	1 N/R	1 N/R	25 N/R	20 N/R	25 N/R	1 N/R	2 N/R	5 N/R	50 N/R	1 N/R	1 N/R		1 N/R
ion Inverter, Buffer	Test	Capacitance 100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	flip-flop	N/R
Part <u>Description</u> Digital, In	Test	Resistance 1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 ОҺтѕ	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 ОҺтѕ	1500 Ohms	1500 ОҺть	1500 Ohms	Digital, Fl	100 Ohms
ESD Class	Test	Type GN	æ	N C	3 5	N G	S	S.	3	N _S	S	S	S	8	S	S	~	SS
Part ESD Mfr Clas N/R	Test	Date N/R	N/R	χ Χ	X/R	χ χ	N/R	X R	X/R	X R	X /R	N/R	χ/χ χ	X /R	N/R	N/R	N/R	X /R
(Cont'd) M	Test	Source Date 371 N/R	371	371	372	373	374	374	375	375	376	376	376	377	378	379	z	572
Part Number S4L04																	72175	

Part		Part) codact	,	
24LS00		NSC	1	1 Digital, Gar	Gate				1217		
	Test	t Te	Test Test	st Test	Test		mber Test T	Test	Failure Test		General
	383	N/R	의 S 같 S	383 N/R SS 1500 Ohms	is 100E-12 F	1 N/R 1	1 FAILED	FAILED 8132 IN.(+) APTT(-) FAILED 771 VCC(+) APTT(-)	49 188 49 188		8 80
	026		0178 SS	100 Ohms	is 200E-12 F	1 N/R	1 FAILED	366 INPUT(1)(+) GND(7)(-)	\$	285	13
	436		1186 SS	1500 Ohms	IS 100E-12 F	7 N/R	5 FAILED	800 INPUT TO GND	2	252	М
24.500		SIG	()	2 Digital,	Gate				LSTTL		
	026		0178 SS	100 Ohms	is 200E-12 F	1 N/R	4 FAILED	513 INPUT(1)(+) GND(7)(-)	\$	285	13
24LS00		N/R	-	1 Digital,	Gate				LSTTL		
	030	N/R	R N/R	R 1500 Ohms	is 100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
	245	N/N	SS	100 Ohms	IS N/R	1 N/R	15 FAILED 15 FAILED 15 FAILED 15 FAILED	85 INPUT(+) GND(-) 83 INPUT(+) GND(-) 80 INPUT(+) GND(-) 80 INPUT(+) GND(-)	74 77 77	381 381 381 381	21 21 21 21 21 21 21
541.502		X /R	1	1 Digital,	Gate				וצעור		
	030	N/R	R N/R	1500 Oh	ms 100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
241.502		FSC	•	1 Digital,	Gate				רצננר		
	436		1186 55	1500 Oh	ms 100E-12 F	5 N/R	1 FAILED	600 INPUT TO GND	\$	252	м
241803		N/R	•	1 Digital,	Gate				רצנור		
	030	N/N	ж У,8	1500 oh	ms 100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13

Part Number		Part ESD Mfr Cla	ESD	Part Descripti	ro				Technology	À	
541.504				Digital,	Inverter,	Buffer			LSTTL		l
	Source 030	Test Date		Test Test <u>Iype Resistance</u> N/R 1500 Ohms	Test <u>Capacitance</u> 100E-12 F	Number Date Pulses Code 1 N/R	Test Result FAILED	Voltage Pin Combination 1500 N/R	Failure Test Criteria Remarks 103 252		General Remarks 13
54LS04		FSC	-	Dígital,	Inverter, Buffer	fer			LSTTL		
	736	1186 SS	SS	1500 Ohms	100E-12 F	8 N/R	1 FAILED	900 INPUT TO GND	\$	252	м
241.504		NSC	~	Digital,	Inverter, Buffer	fer			LSTTL		
	383	N/R	SS	1500 ՕԴաs	100E-12 F	1 N/R	1 FAILED	1263 OUT.(+) APTT(-)	67	188	æ
	436	1186 SS	SS	1500 Ohms	100E-12 F	7 N/R	5 FAILED	800 INPUT TO GND	5	252	٣
541504		TEX	←	Digital,	Inverter, Buffer	fer			רצענד		
	736	1186 SS	SS	1500 Ohms	100E-12 F	4 N/R	1 FAILED	500 INPUT TO OUTPUT	5	252	3
\$41.805		N/R	-	Digital,	Inverter, Buffer	fer			וצדונ		
	30ء	X X	N/N	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
	384	X X	SS	1000 Ohms	200E-12 F	1 N/R	1 FAILED 1 FAILED 1 FAILED	900 EACH PIN(+) 800 EACH PIN(+) 900 EACH PIN(+)	12 9 11	99 104 106	54 54 54
541508		N/R	-	Digital, (Gate				LSTTL		
	030	N/R N/R		1530 Ohms	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
546508		516	-	Digital, I	Gate				רצנור		
	436	1186 SS	SS	1500 Ohms	100E-12 F	5 N/R	1 FAILED	600 INPUT TO GND	\$	252	м

Part ESD Mfr Class N/R 1 Test Test	Part Description Digital, Gate Test Test Number		Test	Technology LSTTL Failure Test
Resistance 1500 Ohms	Pulses Code Device 1 N/R	S Result Vo	Voltage Pin Combination 1500 N/R	103 252 13 13 13 13 13 13 13 13 13 13 13 13 13
k Digital, uate N/R N/R 1500 Ohms 100E-12 F	1 N/R 1	1 FAILED	1500 N/R	103 252
1 Digital, Gate				
1186 SS 1500 Ohms 100E-12 F	7 N/R 5	5 FAILED	800 INPUT TO GND	5 252 LSTTL
1500 Ohms	1 N/R	1 FAILED	1500 N/R	103 252
R 1 Digital, Flip-Flop N/R N/R 1500 Ohms 100E-12 F	1 N/R	1 FAILED	1500 N/R	103 252
1 Digital, Gate				וצעו
N/R N/R 1500 Ohms 100E-12 F	1 N/R	1 FAILED	1500 N/R	103 252
1 Digital, Flip-Flop				LSTTL
N/R N/R 1500 Ohms 100E-12 F	1 N/R	1 FAILED	1500 N/R	103 252
1 Digital, Gate				LSTTL
N/R N/R 1500 Ohms 100E-12 F				103 252

Part		Part ESD Mfr Class	Part Descript	ion				Ţechnology	<u>></u>	
54LS123			Digital,	Multivibrator				וצנור		
	Source 030	Test Date	Test Test Type Resistance N/R 1500 Ohms	Test Capacitance 100E-12 F	Number Date Number Test Pulses Code Devices Resu	#10	Test Voltage Pin Combination 1500 N/R	Failure Test Criteria Remarks 103 252		General Remarks
5615125				1. 2.4.5.5.1				ILIS		!
	736	1186 SS	1500 Ohms	100E-12 F	7 N/R	5 FAILES	800 INPUT TO GND	5	252	M
	927	1186 SS	1500 Ohms	100E-12 F	8 N/R	5 FAILED	900 OUTPUT TO GND	50	252	٣
	736	1186 SS	1500 Ohms	100E-12 F	S N/R	1 FAILED	600 INPUT TO OUTPUT	v	252	3
	927	1186 SS	1500 Ohms	100E-12 F	7 N/R	5 FAILED	800 INPUT TO GND	8	252	٣
	736	1186 SS	1500 Ohms	100E-12 F	4 N/R	5 FAILED	500 INPUT TO GND	2	252	8
	736	1186 SS	1500 Ohms	100E-12 F	3 N/R	5 FAILED	400 INPUT TO OUTPUT	5	252	М
541.5123		TEX 1	1 Digital, M	Multivibrator				רצענר		
	736	1186 SS	1500 Ohms	100E-12 F	10 N/R	1 FAILED	1200 INPUT TO GND	5	252	8
5418125	_	N/R 1	1 Digital, 1	Inverter, Buffer				LSTTL		
	030	N/R N/R	R 1500 Ohms	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
54:5125	-	MOT 1	1 Digital, [Inverter, Buffer				LS11 _L		
	736	1186 SS	1500 Ohms	100E-12 F	7 N/R	1 FAILED	800 INPUT TO GND	5	252	8
5415126	_	N/R 1	1 Digital, I	Inverter, Buffer				רצענר		
	030	N/R N/R	R 1500 Ohms	100E-12 F	1 N/R	i FAILED	1500 ~/R	103	252	13

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	2,8 19.			The second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second secon	LSTTL		1
	num test test test test tast	Number Dute Number	test	Test	Failure Test		General
	ype Resistance Capacitance	Pulses Code Devices	Result	Voltage Pin Combination			Remarks
		1 K/R	1 FA1: ED	1500 N/R	103	252	13
80.00					LSTTL		
	4 01-300, 9440 005, 88 98., 987	ණ න න	CALLED	OND OI INPUT TO GND	Σ	252	٣
65,87ts	Verbound (1991) Orange (1991)				רצנור		
	32 - 478 - 478 - 1500 OPMS - 100E-12 E	1 N/R	1 FAILED	1500 N/R	103	252	13
† / / / / / / / / / / / / / / / / / / /	N'S Cagital, Inventer, Suffer				12121		
	330 - 4/K - 4/R - 1500 OHMS - 103E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
	Sig. 1 Cognati, Inventer, Suffer				LSTTL		
	6 CT + 4 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7 CT - 7	« >> 0	* AILED 5 FAILED	1003 INPUT TO GND	2 ×	252 252	мм
, (C)	Year Digital, Encoder				וצנור		
	31 - 478 - 478 - 1500 Ohms - 100E-12 F	#/# 8/%	1 FALLED	1500 N/R	103	252	13
(1) (4) (4) (5)	478 . Digital, Sate				רצוור		
	332 - 4/9 - 4/8 - 1530 Onths - 1038-12 F	x/x	1 FAILED	1500 N/R	103	252	13
• • • • • • • • • • • • • • • • • • • •	Jexelditing Tresies.				רצנור		
	3 2,-303 0+44 000 000 60.	5 ×/R	1 FAILED	1117 INPUTS(+) GROUND(-)	109	143	13

Part Surper Con Sucs 151	(5,305.9)	Part B	ES0 CL355	Part Descripti Digital	on Multiplexer				<u>Technology</u>	97.	
		5	-		שמנו שונים				LSIIL		
	165	Test Test	r Test	Test Test	fest	Date	Test		Failure T		General
	128	0381	1 SS	128 0381 SS 1000 Ohms	Caparitance 200E-12 F	Pulses Code De 5 N/R	Devices Result V	Voltage bin Conbination 1133 iNPUTS(+) GROUND(-)	Criteria R 109	Remarks Re	Remarks 13
							1 FAILED		109	143	13
							1 FAILED	973 INPUTS(+) GROUND(-)	109	142	13
							1 FAILED	1045 :NPUTS(+) GROUND(-)	109	142	13
5488151		NSC	-	Digital, I	Multiplexer				LSTTL		
	123	0381 SS	SS	1000 Ohms	200E-12 F	5 N/R	1 FAILED	1127 INPUTS(+) GROUND(-)	109	143	13
							1 FAILED	1033 INPU [*] S(+) GROUND(-)	109	143	13
							1 FAILED	950 INPUTS(+) GROUND(-)	109	143	13
							1 FAILED	1042 INPUTS(+) GROUND(-)	109	143	13
								1075 INPUTS(+) GROUND(-)	109	143	13
								700 INPUT(15)(+) GROUND(-)	109	252	13
								_	109	252	13
							1 FAILED	1100 INPUT(15)(GROUND(-)	109	252	13
•			•								
, r, n + r		α Ζ		Digital, M	Multiplexer				LSTTL		
	020	N/N	α (2	N/R 1500 Ohms	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
54.8153		× ∕ ×	-	Digital, N	Digital, Multiplexer				רצנגר		
	n 3 0	N/R	α 2	1530 Ohms	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
	245	d/N	SS	100 Ohms	N/N	1 N/R	15 FAILED	95 INPUT(+) GND(-)	27	186	21
54.8.53		516	2	Digital, M	ful tiplexer				רצנור		
	123	0331	SS	1000 Ohms	200E-12 F	S N/R	5 PASSED	1500 INPUTS(+) GROUND(-)	109	586	13

75.877	Part ESO M/R Class	Fart Description Digital, Decoder				Technology LSTTL		1
	rest ce Date	Test Test Resistance Capacitance	Number Date Number Pulses Code Devices	Test Result	Test Voltage Pin Combination		Sylve	General Remarks
	350 N/R N/R	1500 Ohas 100E-12 F	1 N/R	1 FAILED	1500 N/R	10 2	767	2
5424155	N/R	Digital, Decoder				LSTTL		
	030 N/R N/R	1500 Ohms 100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
54,8157	AMD 2	Digital, Multiplexer				12111		
	026 0291 SS	130 Ohms 200E-12 F	1 N/R	4 FAILED	433 INPUT(15)(+) GND(8)(·)	50	285	13
5+1.5157	N.S.C.	Orgital, Multiplexer				רצננד		
	436 0488 SS	1500 Ohms 100E-12 F	1 N/R	5 FAILED	200 INPUT TO OUTPUT	5	252	3
5415157	N/R	Oigital, Multiplexer				LSTTL		
	030 N/R N,R	1500 Ohms 100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
54.8.46	N/8	Digital, Counter/Divider				LSTTL		
	030 N/E N/R	15c0 Ohms 100E-12 F	7 X/R	1 FAILED	1500 N/R	103	252	13
19,8,01	α 2	Digital, Counter/Divider				וצנור		
	330 N/P N/P	1500 Ohms 100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
\$ 4 (8) 4 (516	l Digital, Counter/Divider				LSTTL		
	436 1196 55	1500 Ohms 100E-12 F	9 N/R	S FAILED	1000 IMPUT TO GND	. ∽	252	3

Part Number 5+LS161A		Part ESD Mfr Cla	ESD Class	Part <u>Descripti</u> Digital,	on Counter/Divider				<u>Tezhnology</u> LSTL	*	
	Test Sour 436	ટી	st 138 te 1yp 36 SS	Test Resistance 1500 Ohms	Test Capacitance 100E-12 F	Number Date Number Test Pulses Code Devices Resul 6 8612 1 FAILE	비요	Voltage Pin Combination 700 INPUT TO GND	Failure Test <u>Criteria Remarks</u> 5 252	Test Ger Remarks Ren 252	General Remarks 3
5418162	030	x x x x x x x x x x x x x x x x x x x	, x , x , x , x , x , x , x , x , x , x	Digitał, 1500 ohm	Counter/Divider s 100E-12 F	1 N/R	1 FAILED	1500 N/R	LSTTL 103	252	13
5418163	030	x x x	1 N/R	Digital, 1500 Ohms	Counter/Divider 100E-12 F	1 N/R	1 FAILED	1500 N/R	133 133	252	13
5418164	390	TEX N/R	c S	Digital, 1500 Ohms	Register, Shift 100E-12 F 5	5 N/R	1 PASSED	2000 S/R	LSTTL. 1C5	247	=
5415164	030	N/R N/R	Z / Z	Digital, 1500 Ohms	Register, Shift 100E-12 F	1 N/R	1 FAILED	1500 N/R	LSTTL 103	252	5
5415164	026	S1G 0281	1 88	Digital, 100 Ohms	Register, Shift : 200E-12 F	1 N/R 4	4 FAILED	228 INPUT(1)(+) OUT(7)(-)	LSTTL 35	285	13
5418165	030	ž	N/R	rR 1 Digital, Rec N/R N/R 1500 Ohms 1	Register, Shift 100E-12 F	1 N/R	1 FAILED	1500 N/R	LSTTL 103	252	13
541.5166	030	N/R N/R		1 Digital, Reg N/R 1500 Ohms 1	Register, Shift 100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	51

Part Number (Cont'd)	1t 'd)	Part ESD Mfr Class	Part <u>Descripti</u>	ç				Technology		ļ
24LS166		TEX 1	Digital, R	Register, Shift	<u>.</u>			ראור		
	Source	Test Test	Source Date Type Resistance	Test Capacitance		Number Date Number Test T Pulses Code Devices Result V	Test Test Result Voltage Pin Combination Fairen 3500 INDIT TO GND	Failure Test General Criteria Remarks Remarks 5 252 3	t Gen narks Rem 252	General Remarks 3
	9 9 9 9 9 9 9 9	1186 SS		100E - 12	5 N/R	5 FAILED	600 INPUT TO OUTPUT	5	252	M
	736	1186 SS			9 N/R	1 FAILED	1000 INPUT TO GND	ιΛ	252	8
54LS166		MOT 1	Digital, R	Register, Shift	ţ.			וצנו		
	436	1186 SS	1500 Ohms	100E-12 F	3 N/R	1 FAILED	400 INPUT TO GND	5	252	٣
	436	1186 SS	1500 Ohms	100E-12 F	1 N/R	5 FAILED	200 INPUT TO GND	\$	252	٣
	436	1186 SS	1500 Ohms	100E-12 F	5 N/R	5 FAILED	600 INPUT TO OUTPUT	2	252	٣
	436	1186 SS	1500 Ohms	100E-12 F	6 N/R	5 FAILED	700 INPUT TO OUTPUT	5	252	٣
	736	1186 SS	1500 Ohms	100E-12 F	5 N/R	1 FAILED	600 INPUT TO OUTPUT	2	252	M
	436	1186 SS	1500 Ohms	100E-12 F	4 N/R	5 FAILED	500 INPUT TO OUTPUT	2	252	м
541.5173		N/R	1 Digital, R	Flip-Flop				רצענר		
	03.)	N/R N/R	R 1500 Ohms	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
5418174		N/R	1 Digital, 1	Flip-Flop				רצנור		
	030	N/R N/R	R 1500 Ohms 100E-12	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	51
5418175		x/x	1 Digital,	Fi ip-Flop				ווציז		
	030	N/R N/R	R 1500 Ohms	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13

Part Number (Con	(contid)	Part ESD Mfr Cla	3,	Part Description	c					}	
5418175		\$16	-	Digital, F	Flip-Flop				TELL	75.	1
	Test	t Test Test Test	Test	Test	Test	Number Date Number Test		Test	Failure] (3€] (3€	(senera)
	Sour	ce Date 1	TYB:	Source Date Type Resistance	Capaci tance	Pulses Code Da	Code Devices Result V	Voltage Pin Combination			Remarks
	436	1186 S	SS	1500 Ohms		18 N/R		4000 N/R	2		~
	436	1186 SS		1500 Ohms	100E-12 F	7 N/R	1 FAILED	800 INPUT TO GND	5	252	٣
5+18175		FSC	,-	Digital, Fl	flim-flop				וצעור		
	390	N/R G	8	1500 Ohms	100E-12 F	5 N/R	1 PASSED	2000 S/R	105	247	1
	436	1186 S	. ss	1500 Ohms	130E-12 F	9 N/R	1 FAILED	1000 INPUT TO OUTPUT	5	252	23
	436	1186 SS		1500 Ohms	100E-12 F	4 N/R	1 FAILED	500 INPUT TO GND	5	252	٣
54,5181		N/R	-	Jigital, Ar	Digital, Arithmetic, Logic Unit	ic Unit			LSTTL		
	036	N/R N,	N/R 1	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
54LS192		N/R	φ •	Digital, Co	Counter/Divider				LSTTL		
	330	N/R	N/R 1	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
	572	N/R SS	ss 1	100 Ohms	N/R	1 N/R	15 FAILED	59 INPUT(+) GND(-)	27	186	21
541.5193		N/R	۵ -	Digital, Co	ounter/Divider				רצוור		
	030	N/R N/	N/8	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
541.5194		N/R	0	Digital, Re	egister, Shift				LSTTL		
	030	x /x	/R 1	N/R N/R 1500 Ohms	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13

Part Number SI. 810A		Part ESD Mfr CLO	CLOSS.	Part Description Digital Com	ion Counter/Divider	١			Technology		[
0418146		<u>د</u>	-			. :			1001		00000
	rest	Test	Test	Test Test Test Date Ivae Desistance	Test Papacitance	Number Date Pulses Code	Result	iest Voltage Pin Combination	_		Remarks
	030	N/R	N/R	1500 Ohms	030 N/R N/R 1500 Ohms 100E-12 F	1 N/R	FAILED	1500 N/R	103		13
5418197		7 / N		Digital, C	Counter/Divider	۷			LSTTL		
	030	*/R	N/N	1500 Ohms 100E-12	100E-12 F	. N/R	1 FAILED	1500 N/R	103	252	13
541820		Z/R	-	Digital, G	Gate				LSTTL		
	030	N/R	N/R	1500 Oh	ms 100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
541820		SIS	-	Digital, G	Gate				רצנור		
	436	1186 SS	SS	1500 Ohms 100E-12	100E-12 F	9 N/R	5 FAILED	1000 INPUT TO INPUT	5	252	ю
541821		Z/R	-	Digital, G	Gate				רפנור		
	030	N/R	X X	1500 Ohms 100E-12	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
541 \$221		N/R	-	Digital, №	Digital, Multivibrator				רצגנר		
	030	N/R	N/R	1570 Ohms	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
2418240		N/N	-	Digital, l	Digital, Line/Bus Driver	د د			רצונר		
	030	N /R	χ γ	1500 Ohms 100E-12	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
5418244		x 'x	-	Digital, l	Digital, Line/Bus Driver	er			T811F		
	030	N/R	N/R	1500 Ohms	100E-12 F	i N/R	1 FAILED	1500 N/R	103	252	13

Part Number (Con S44.8244	(Cont.d)	Pant ESD Mf. Class	Part <u>Pescripti</u> Digital,	on Line/-us Driver				1 <u>echnology</u>	2	ļ
	Tes Sour	Test Test Test Test Course Date Ivee Dasia	60	Test Number	Date	Test	st company of the company br>of the company of the com	Failure Test		General
	436	1186 SS			N/R	1 FAILED	1400 INPUT TO GND	Litteria kemarks		Kemarks 3
5418244		516	Digital, Li	Line/Bus Driver				וצנור		
	736	1186 SS	1500 Ohms	100E-12 F	S N/R	1 FAILED	600 INPUT TO GND	5	252	М
2418245		N/R	Digital, Ind	Transceiver				ופדדנ		
	030	N/R N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
2418245		TEX 1	Digital, Tra	Transceiver				רצעור		
	436	1186 55	1500 Ohms	100E-12 F	6 N/R	1 FAILED	700 INPUT TO OUTPUT	72	252	٣
54LS251		N/R 1	Digital, Mul	Multiplexer				רצעור		
	030		N/R N/R 1500 Ohms 1	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
5418253		N/R 1	Digital, Mul	Multiplexer				LSTTL		
	030	N/R N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
5418253		FSC 1	Digital, Mul	Multiplexer				רצנור		
	927	1186 SS	1500 Ohms 1	100E-12 F	6 N/R	5 FAILED	700 INPUT TO GND	\$	252	3
	436	1186 SS	1500 Ohms 1	100E-12 F	5 N/R	1 FAILED	600 INPUT TO GND	\$	252	8

Part Number (Co	(Cont.d)	Part ESD Mfr Class	Part Description	Ę				Technology	<u> </u>	
	1		Digital,	Multiplexer				רצוור		1
	Test	Test Test Test			Number Date Number	Test	Test			ûeneral
	Sourc 436	Source Date Type 436 1186 SS	Type Resis ce SS 1500 Ohms	Capacitance 100E-12 F	Pulses Code Devices 7 N/R 1	Result FAILED	Voltage Pin Combination 800 INPUT TO GND	Criteria Re	Remarks Re 252	Remarks 3
	736	1186 SS	1500 Ohms	100E-12 F	10 N/R	5 FAILED	1200 INPUT TO GND	5	252	ĸ
	436	1186 SS	1500 Ohms	100E-12 F	4 N/R	1 FAILED	500 INPUT TO GND	5	252	M
	436	1186 SS	1500 Ohms	100E-12 F	5 N/R	5 FAILED	600 INPUT TO GND	5	252	М
	736	1186 SS	1500 Ohms	100E-12 F	4 N/R	S FAILED	500 INPUT TO GND	5	252	٣
5418253		NSC 1	Digital, M	Multiplexer				רצעור		
	736	1186 SS	1500 Ohms	100E-12 F	4 N/R	5 FAILED	500 INPUT TO GND	5	252	3
	736	1186 SS	1500 Ohms	100E-12 F	3 N/R	1 FAILED	400 INPUT TO OUTPUT	S	252	8
	736	1186 SS	1500 ОҺШЅ	100E-12 F	8 N/R	1 FAILED	900 INPUT TO GND	5	252	ĸ
2418257		N/R	Digital, M	Multip'exer				TALK TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO THE TENT TO T		
	030	N/R N/R	N/R N/R 1500 Ohms 100E-12	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
5418259		N/R 1	Digital,	Latch				וצעור		
	030	N/R N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
241526		HOT 1	Digital, L	Line/Bus Driver	٤			רצעור		
	9£7	1186 SS	1500 Ohms	100E-12 F	7 8534	1 FAILED	800 INPUT TO GND	ľ	252	٣

Part Number 5+LS266		Part ESD Mfr Cla	ESD Class	Part <u>Descript</u> Digital,	ion Gate					<u>,</u>	1
	Test <u>Source</u> 030	Source Date 030 N/R	st Tes	Test Test Type Resistance N/R 1500 Ohms	Jest <u>Capacitance</u> 100E-12 F		+1 e	Test Voltage Pin Combination 1500 N/R	Failure Test Criteria Remai	25.25	General Remarks
541527		ν «/		Digital, Ga	Gate				LSTTL		!
	030	N/R	N/N	1500 Ohms 100E-12	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
5418279		N/R	-	Digital,	Latch				LSTTL		
	030	N/R	N N	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
5415280		X/R	_	Digital, Er	Error Detect/Correct, Parity/Carry Gen	rrect, Parity/	Carry Gen		LSTTL		
	030	N/R	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
5418283		N/R	-	Digital,	Anithmetic, Adden, Full	er, Full			וצננו		
	030	X/R	A/R	1500 Ohms	100E-12 F	1 N/R	1 FALLED	15 i) N/R	103	252	13
5628755		N/R	-	Digital,	Register, Shift				LSTTL		
	030	N/R	2/2	1500 Ohms	100E-12 E	1 N/R	1 FAILED	1500 N/R	103	252	13
2415298		N/R	-	Digital, Mu	Multiplexer				LSTTL		
	030	N/R		N/R 1500 Ohms	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
541 5299		N/R	-	Digital, Re	Register, Shift				רצוור		
	030	ν/	N/R	1500 Ohms	100E-12 F	N/R	1 FAILED	1500 N/R	103	252	13

Auft Mumber (Pan	(Conf.41)	Part ES9 Mfr Class	Part S Describtion	202				Te:hnology	>	
5 -1. 5299		15.X		Register, Shift	 			LSTTL		1
	Test	Test Test Test	st Test	Test	Jate	umber Test T	lest	Failune Test	3	General
	\$500c	1186 SS	Source Date Type Resistance 436 1186 SS 1500 Ohms	Lapacitance 100E-12 F	4 N/R	2 FAILED	2 FAILED 500 INPUT TO OUTPUT	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	252	3
541.833		N/R	1 Digitaι,	Gate				71187		
	030	N/R N/R		1590 Ohms 1005-12 F	X X .	1 FAILED	3500 W/R	103	252	13
5+1832		8/X	1 Digital,	6.3 t.e				LS11L		
	030	N/R N/R	1530 Ohms	s 100E-12 f	1 N/R	1 FAILED	1500 N/R	103	252	13
5+1832		FSC 1	Digital,	Gate				LSTTL		
	436	1186 S3		1500 Ohms 1806-12 F	5 N/R	1 FALLED	ZOD INPUT	\$	252	٣
5+1.8353		Z/Z	l Digital,	Multiplan				LSTTL		
	.53	8/8 8/8	ร 1500 อกศร		: : 		g 2	103	252	13
5+,3555		Us.	: Digital,	Erney/Bay Ontiver	-			1811		
	\$55	118c SS	1500 Ohms	s 100E2 F	19 8426	1 PASSED	878 (33)*	2	252	~
	436	1186 55	1500 Ohms	s 100E-12 E	7.8426	1 FALLED 5 FALLED	800 TNPUT TO OUTPUT 800 INPUT TO OUTPUT	\$ \$	252	w w
54:S\$65A		NSC 2	2 Digital	Line/Bus Oriver	Ļ			LSTTL		
	736	1186 55	1500 Ohms	s 100E-12 F	17 N/R	S FAILED	3500 N/R	\$	252	Ω

Part Number		Part ESD Mfr Class	Part Description				Technology		
5418307		N/R 1	Digital, Line/Bus Driver				רצעור		
	Test	Test Test Test	. Test Test Numb	Number Date Number Test	Test Test	.	failure Test	st Ger	General
	Sour 030	Source Date Type Resistance 030 N/R N/R 1500 Ohms	Resistance Capacitance Puls 1500 Ohms 100E-12 F	ses Code Devices	s Result Vol	Capacitance Pulses Code Devices Result Voltage Pin Combination 100E-12 F 1 N/R 1 FAILED 1500 N/R	Criteria Remarks Remarks	narks Rer 252	narks 13
5413368		N/R 1	Digital, Line/Bus Driver				LSTTL		
	030	N/R	N/R 1500 Ohms 100E-12 F	1 N/R 1	1 FAILED	1500 N/R	103	252	13
241837		N/R 1	Digital, Inverter, Buffer				רצענר		
	030	N/R N/R	1500 Ohms 100E-12 F	1 N/R 1	1 FAILED	1500 N/R	103	252	13
241537		1 518	Digital, Inverter, Buffer				LSTTL		
	436	1186 SS	1500 Ohms 100E-12 F	5 N/R 1	1 FAILED	600 INPUT TO GND	50	252	3
5418373		N/8	Digital, Latch				LSTTL		
	030		N/R N/R 1500 Ohms 100E-12 F	1 N/R 1	1 FAILED	1500 N/R	103	252	13
5418373		TEX 1	Digital, Latch				LSTTL		
	736	1186 SS	1500 Ohms 100E-12 F	9 N/R 1	1 FAILED	1000 INPUT TO GND	2	252	M
	736	1186 SS	1500 Ohms 100E-12 F	3 N/R 1	1 FAILED	400 INPUT TO GND	5	252	٣
54LS374		N/R	Digital, Flip-Flop				רצנור		
	030	N/R N/R	1500 Ohms 100E-12 F	1 N/R 1	1 FAILED	1500 N/R	103	252	13

Sart Wannar (Doorld)	Part ESD Mfr Class	Part Description				Technology		
1 .	MOT 3	Digital, Flip-Flop				LSTTL		ı
	Test Test Test Test	Test	Number Date Number I	Test Test	, t	Failure Test		ral
	ce Date Type	Capacitance	Devices		Voltage Pin Combination		Remarks Remarks	ş
	+36 1186 SS 1	1500 Ohms 100E-12 F	18 N/R 1 P	PASSED	4000 N/R	<u>~</u>	252	
5+1.538	N/R 1	Digital, Inverter, Buffer				LSTTL		
	C30 N/R N/R 1	1500 Ohms 100E-12 F	1 N/R 1 F	1 FAILED	1500 N/R	103	252	13
54LS390	N/R 1 C	Digital, Counter/Divider				LSTTL		
	030 N/R N/R 1	1500 Ohms 100E-12 F	1 N/R 1 F	FAILED	1500 N/R	103	252	13
241S390	TEX 1 C	Digital, Counter/Divider				רצנור		
	436 1186 SS 1	1500 Ohms 100E-12 F	13 N/R 1 F	1 °AILED	1800 INPUT TO GND	5	252	2
54[5393	N/R 1 C	Digital, Counter/Divider				רצנור		
	030 N/R N/R 1	1500 Ohims 100E-12 F	1 N/R 1 F	1 FAILED	1500 N/R	103	252	13
2418393	MOT 1 C	Digital, Counter/Divider				LSTTL		
	436 1186 55	1500 Ohms 100E-12 F	10 N/R 1 F	1 FAILED	1200 INPUT TO OUTPUT	ı∽	? ;	м
5415393	TEX 1 C	Digital, Counter/Divider				רצננר		
	436 1186 SS	1500 Ohms 100E-12 F	5 N/R 1 F	1 FAILED	600 INPUT TO OUTPUT	ν	252	M
24,540	N/R 1 (Digital, Inverter, Buffer				רצננר		
	030 N/R N/R	1500 Ohms 100E-12 F	1 N/R 1 F	1 FAILED	1500 N/R	103	252	13

Variet (Contid)	Part (5) Mtr	t ESD Class		on Trioritor Button				Technology	X	1
7	2 V		מולים ולים ולים ולים ולים ולים ולים ולים	ivercer, burrer				ראור		
	Test T	Test Test Test	Test	Test	Date	Test	st mann of continue	Failure To		General
	-35 0 -35 0	388 SS	+35 0588 SS 1500 0hms	100E-12 F	9 N/R 5	FAILED	1000 INPUT TO OUTPUT	5 5		S S S S S S S S S S S S S S S S S S S
						S FAIL D	1000 INPUT TO COMMON	ιΛ	252	~
	+36	1186 SS	1500 Ohms	100E-12 F	11 N/R	5 FAILED	1400 INPUT TO GND	S	252	٣
C) † %) † (X X	-	Digital, Decoder	Japose				LSTTL		
	030 N	N/R N/R	1500 Օհուգ	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
50 00 0 1 1 1 C	α/ <u>ν</u>	•	O'gital, Ga	Gate				LSTTL		
	N 080	N/R N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
, t.	N/R		Digital, Ga	Gate				LSTTL		
	N 050	8/N 8/N	1500 Ohms	100E-12 F	1 N/R	! FAILED	1500 N/R	103	252	13
505,46	Z Z	-	Digital, Re	Register, File				וצוור		
	₹ 020	4/R N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	×	•	Unear, Comparator	iparator				LS77L		
	136	1186 55	1500 Obms	100E-12 F	5 9,624	2 FAILED	600 INPUT TO OUTPUT	5	252	٣
K 6270 + 6	ж ш ы	F-	Digital, Co	Digital, Counter/Divider				רצנור		
	55.	1196 SS	1500 Ohms	100E-12 F	7 N/R	2 FAILED	800 INPUT TO GND	5	252	3

Part]	Part ESO Mfr Class	Part Descript	ت ا				Technology		ŀ
54LS/3		516	l Digital, F	Flip-Flop				רצוור		
	Test	Test Test Test	st Test	Test	Sate		Test	Failure Test	; ڊ	eral
	436	1186 SS	3 Jurce Date 17pe Keststance 436 1186 SS 1500 Ohms	.00E-12 F	15 8519 5		FAILED 2500 INPUT TO SND	2	252 3	2 2
	736	1186 SS	1500 Ohms	100E-12 F	10 8519	5 FAILED	1200 INPUT TO GND	5	252	8
54LS74		NSC 1	1 Digital, F	Flip-Flop				LSTTL		
	383	N/R SS	1500 Chms	100E-12 F	N/R	1 FAILED 1 FAILED 1 FAILED	133 IN.(+) APTT(-) 280 OUT.(+) APTT(-) 483 VCC(+) APTT(-)	67 67	188 188 188	er 20 20
54LS74		FSC 1	1 Digital, Fi	Flip-Flop				רצננר		
	736	1186 SS	1500 Ohms	100E-12 F	8 N/R	1 FAILED	900 INPUT TO OUTPUT	5	252	M
	736	1186 53	1500 Ohms	100E-12 F	12 N/R	1 FAILED	1600 INPUT TO GND	\$	252	3
541874		2 918	2 Digital, FI	Flip-Flop				רצונר		
	736	1186 SS	1500 Ohms	1005-12 F	15 N/R	1 FAILED	2500 INPUT TO GND	5	252	3
241874		N/R 1	1 Digital, F	Flip-Flop				רצענר		
	030	N/R N/R	R 1500 Ohms	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
24LS74A		S16 2	2 Digital, F	Flip-Flop				וצננו		
	736	1186 SS	1500 Ohms 100E-12	100E-12 F	15 N/R	5 FAILED	2500 INPUT TO GND	2	252	8
541875		N/R	1 Digital, La	Latch				LSTTL		
	030	N/R N/R	R 1500 Ohms	100E-12 F	1 N. R	1 FAILED	1500 N/R	103	252	13

Part Number	Part ESD Part Mfr Class Description	Tachool	
541.876	-	TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING THE TECKING TO THE TECKING TO THE TECKING TO THE TECKING THE TECKING TO THE TECKING TO THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TECKING THE TEC	1
	Number Date Number Test Test		la!
	392 1086 SS 1500 Ohms 100E-12 F 1 N/R 5 FAILED 1250 EACH PIN TO 5 &	13 (+ -) Criteria Remarks Kemarks 13 (+ -) 19 252 13	7ks 13
541585	N/R 1 Linear, Comparator	רצענר	
	030 N/R N/R 1500 Ohms 100E-12 F 1 N/R 1 FAILED 1500 N/R	103 252 1.	13
541585	MOT 1 Linear, Comparator	LSTTL	
	436 1186 SS 1500 Ohms 100E-12 F 7 N/R 1 FAILED 800 VCC TO GND	5 252	٨
541586	TEX 2 Digital, Gate	רצנור	
	390 N/R GN 1500 Ohms 100E-12 F 5 N/R 1 PASSED 2000 S/R	105 247 1	11
985775	N/R 1 Digital, Gate	LSTTL	
	030 N/R N/R 1500 Ohms 100E-12 F 1 N/R 1 FAILED 1500 N.R	103 252 13	13
241.890	NSC 1 Digital, Counter/Divider	1811	
	383 N/R SS 1500 Ohms 100E-12 F 1 N/R 1 FAILED 2692 IN.(-) APTT(+) 1 FAILED 618 OUT.(-) APTT(+) 1 FAILED 459716 VCC(-) APTT(-)	49 188 8 49 188 8 49 188	∞ ∞ ∞
241.590	MOT 1 Digital, Counter/Divider	LSTTL	
	436 1186 SS 1500 Ohms 100E-12 F 6 N/R 1 FAILED 700 INPUT TO GND	5 252 3	M

Part Number 54LS92	Part ESD Mfr Class N/R 1	Part Description Digital, Counter/Divider				Technology LSTTL	
Source 030	Test Test Test Test Source Date Type Resis 030 N/R N/R 1500	Test Test Resistance Capacitance 1500 Ohms 100E-12 F	Date Code N/R	Test Test <u>S Result Volta</u>	age Pin Combination 500 N/R	Failure Test Criteria Remai 103	Test General Remarks Remarks 252 13
	TEX 1	Digital, Counter/Divider				רצוור	
736	5 1186 SS	1500 Ohms 100E-12 F	13 N/R	1 FAILED	1800 IN-UT TO GND	2	252 3
	MOT	Digital, Counter/Divider				LSTTL	
435	s 1186 SS	1500 Ohms 100E-12 F	3 8535	1 FAILED	400 INPUT TO GND	5	252 3
	TEX 2	Digital, Gate				STTL	
393	O N/R GN	1500 Ohms 100E-12 F	5 N/R	1 PASSED	2000 S/R	105	247 11
	N/R	Digital, Gate				STTL	
030	O N/R N/R	1500 Ohms 100E-12 F	1 N/R	1 FAILED	1000 N/R	103	252 13
572	S N/R SS	100 Ohms N/R	1 N/R	15 FAILED	36 INPUT(+) GND(-)	27	186 21
	516	Digital, Gate				STTL	
026	6 0178 SS	100 Ohms 200E-12 F	1 N/R	4 FAILED	228 INPUT(1)(+) GND(7)(-)	•	285 13
	N/R	Digital, Gate				STTL	
030	0 N/R N/R	1500 Ohms 100E-12 F	1 N/R	1 FAILED	1000 N/R	103	252 13

Part Number 54803		Part B	ESD Class	Part <u>Description</u> Digital, Gal	on Gate				Technology	76	
	Test Source 030	Test Test Source Date 030 N/R	t Test E Type N/R	Resistance 1500 Ohms	Test <u>Capacitance</u> 100E-12 F	Number Date Number Pulses Code Devices 1 N/R	Test Result	Test Voltage Pin Combination 1000 N/R	Failure T	Test Ge Remarks Re 252	General Remarks 13
54804		TEX	-	Digital, I	Inverter, Buffer	ē			STTL		
	238	N/R	S.	1500 Ohms	200E-12 F	200 N/R	1 PASSED	600 VCC(14)(+) IN.(1)(-)	78	252	13
	297	N/R	≥	1500 Ohms	100E-12 F	200 N/R	1 PASSED	800 VCC(14)(+) IN.(1)(-)	84	252	13
	238	N/R	S	1500 Ohms	200E-12 F	1 N/R	1 PASSED	800 VCC(14)(+) IN.(1)(-)	78	252	13
	314	N/R	S	1500 Ohms	100E-12 F	200 N/R	1 PASSED	900 VCC(14)(+) IN.(1)(-)	84	252	13
	319	N/R	N	1500 Ohms	100E-12 F	200 N/R	1 PASSED	975 VCC(14)(+) IN.(1)(-)	84	252	13
	320	N/R	S S	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1000 VCC(14)(+) IN.(1)(-)	77	252	13
	320	N/R	S	1500 Ohms	100E-12 F	200 N/R	2 PASSED	1060 VCC(14)(+) IN.(1)(-)	84	252	13
	320	N/R	N O	1500 Ohms	100E-12 F	1 N/R	4 FAILED	1000 VCC(14)(+) IN.(1)(-)	121	252	13
	320	N/R	Š	1500 Ohms	100E-12 F	2 N/R	3 FAILED	1000 VCC(14)(+) IN.(1)(-)	121	252	13
	320	N/R	Š	1500 Ohms	100E-12 F	9 N/R	1 FAILED	1000 VCC(14)(+) IN.(1)(-)	121	252	13
	320	N/R	8	1500 Ohms	100E-12 F	30 N/R	1 FAILED	1000 VCC(14)(+) IN.(1)(-)	121	252	13
	320	N/R	S	1500 Ohms	100E-12 F	500 N/R	1 PASSED	1063 VCC(14)(+) IN.(1)(-)	121	252	13
	320	N/R	N O	1500 Ohms	100E-12 F	2 N/R	2 FAILED	1000 VCC(14)(+) IN.(1)(-)	121	252	13
	320	N/R	8	1500 Ohms	100E-12 F	6 N/R	1 FAILED	1000 VCC(14)(+) IN.(1)(-)	121	252	13
	321	N/R	NS	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1000 VCC(14)(+) IN.(1)(-)	77	252	13

	Test General Remarks Remarks 252 13 252 13		252 13 252 13	252 13	252 13	252 13	252 13 252 13 252 13	252 13	252 13 252 13	252 13 252 13 252 13	252 13	252 13	252 13
	Failurs Criteria 77 121	121	121	121	121	121	121	121	84	77 121 77	121	77	78
	Pin Combination VCC(14)(+) IN.(1)(-) VCC(14)(+) IN.(1)(-)	(1) IN.(1)(-)	-) IN.(1)(-) -) IN.(1)(-)	+) IN.(1)(-)	+) IN.(1)(-)	·) IN.(1)(·)	VCC(14)(+) IN.(1)(-) VCC(14)(+) IN.(1)(-) VCC(14)(+) IN.(1)(-)	+) IN.(1)(-)	+) IN.(1)(-)	VCC(14)(+) IN.(1)(-) VCC(14)(+) IN.(1)(-) VCC(14)(+) IN.(1)(-)	+) IN.(1)(-)	(-)(1)(-)	+) IN.(1)(-)
	Test Voltage Pin Combination 1100 VCC(14)(+) IN.(1)(-) 1100 VCC(14)(+) IN.(1)(-)	1125 VCC(14)(+) IN.(1)(-)	1125 VCC(14)(-) IN.(1)(-) 1125 VCC(14)(-) IN.(1)(-)	1125 VCC(14)(+) IN.(1)(-)	1125 VCC(14)(+) IN.(1)(-)	1150 VCC(14)(+) IN.(1)(+)	1200 VCC(14)(- 1200 VCC(14)(- 1200 VCC(14)(-	1200 VCC(14)(+) IN.(1)(-)	1200 VCC(14)(+) IN.(1)(-) 1200 VCC(14)(+) IN.(1)(-)	1250 VCC(14)(+) IN.(1)(-) 1250 VCC(14)(+) IN.(1)(-) 1250 VCC(14)(+) IN.(1)(-)	1250 VCC(14)(+) IN.(1)(-)	1250 VCC(14)(+) IN.(1)(-)	1300 VCC(14)(+) IN.(1)(-)
	Fest Result FAILED FAILED	4 FAILED	2 FAILED 2 FAILED	1 FAILED	1 FAILED	1 FAILED	2 FAILED 4 FAILED 6 PASSED	1 PASSED	1 PASSED 2 FAILED	1 FAILED 5 FAILED 2 FAILED	2 FAILED	1 FAILED	1 PASSED
,	Number Date Number Pulses Code Devices 2 N/R 2	1 N/R	2 N/R	3 N/R	40 N/R	1 N/R	1 N/R	5 N/R	2 N/R	1 N/R	2 N/R	5 N/R	1 N/R
	Test <u>Capacitance</u> 100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E - 12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F
	Test Test <u>Iype Resistance</u> GN 1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms
	Tes GN	S	2	S	ďχ	N _O	3	S	S	8	Š	S.	3
	rest B Date N/R	N/R	N/R	N/R	N/R	N/N	ν «	N/R	χ Χ	α '×	4/8	N/R	X ∕ X
	Test fest Source Da <u>te</u> 322 N/R	323	323	323	323	324	325	52¢	325	\$26	326	326	327
* 7 7 7 7 7													

Part	(6,100)	Part	ESD Class	Part	c				Technology	è	
1				Digital,	Inverter, Buffer	٠			STTL		
	Test	Test Test Test	t Tes	t Test	Test	Number Date Number	Test	Test	Failure I	Test	General
	Sour	Source Date	e Type	Type Resistance	Capac i tance	Pulses Code Devices	Result	Voltage Pin Combination	Criteria R	Remarks	Remarks
	328	N/R	NS.	1500 Ohms		1 N/R	FAILED	1350 VCC(14)(+) IN.(1)(-)	121	252	5 5
									=	767	2
	329	N/R	S	1500 Ohms	100E-12 F	1 N/R	5 FAILED	1375 VCC(14)(+) IN.(1)(-)	121	252	13
	329	N/R	3	1500 Ohms	100E-12 F	2 N/R	2 FAILED	1375 VCC(14)(+) IN.(1)(-)	121	252	13
	329	N/R	S	1500 Ohms	100E-12 F	3 N/R	2 FAILED	1375 VCC(14)(+) IN.(1)(-)	121	252	13
	326	N/R	S	1500 Ohms	100E-12 F	4 N/R	1 FAILED	1375 VCC(14)(+) IN.(1)(-)	77	252	13
	329	N/R	S	1500 Ohms	100E-12 F	1 N/R		1375 VCC(14)(+) IN.(1)(-)	121	252	13
							4 FAILED 2 PASSED	1375 VCC(14)(+) IN.(1)(-) 1375 VCC(14)(+) IN.(1)(-)	77	252	ភ ស
	330	N/R	3	1500 Ohms	100E-12 F	1 N/R	2 PASSED	1500 VCC(14)(+) IN.(1)(-)	8	252	13
							7 FAILED	1500 VCC(14)(+) IN.(1)(-)	121	252	13
	330	N/R	Š	1500 Ohms	100E-12 F	2 N/R	1 FAILED	1500 VCC(14)(+) IN.(1)(-)	121	252	13
	330	N/R	S	1500 Ohms	100E-12 F	3 N/R	1 FAILED 1 FAILED	1500 VCC(14)(+) IN.(1)(-) 1500 VCC(14)(+) IN.(1)(-)	121 77	252 252	13
	331	N/R	ß	1500 Ohms	200E-12 F	1 N/R	1 FAILED	1500 VCC(14)(+) IN.(1)(-)	77	252	13
	346	N/R	S	1500 Ohms	100E-12 F	1 N/R	1 FAILED	2000 VCC(14)(+) IN.(1)(-)	77	252	13
	347	N/R	S	1500 Ohms	200E-12 F	1 N/R	1 FAILED	2000 VCC(14)(+) IN.(1)(-)	77	252	13
24804		FSC	2	Digital,	Inverter, Buffer	ب			STTL		
	390	N/R	S	1500 Ohms	100E-12 F	5 N/R	1 PASSED	2000 s/R	105	247	=

Part Number (Contid)		Part ES	ESD Class	Part Description	uo				Technology		l
1	i		-	Digital,	Inverter, Buffer				STTL		
	Iest	Test	Test	Test	Test	Number Date Number Test	er Test Te	Test	Failure Test	st Ger	General
	Source 030	Date N/R	Type N/R	Resistance 1500 Ohms	Capacitance 100E-12 F	Pulses Code Devi	ces Result V	Code Devices Result Voltage Pin Combination N/R 1 FAILED 1000 N/R	Criteria Remarks Remarks 103 252 13	narks <u>Rei</u> 252	narks 13
\$480\$		#/R	-	Digital,	Inverter, Buffer				STTL		
	030	N/N	N/R	1500 Ohm	N/R 1500 Ohms 100E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13
54808		N/R	-	Digital,	Gate				STTL		
	030	N/N	χ χ		1500 Ohms 100E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13
54510		TEX	2	Digital,	Gate				STTL		
	700	1175	SS	O Ohms	s 125E-12 F	1 N/R	1 FAILED 1 FAILED 1 FAILED	600 INPUT 1700 INPUT 2200 INPUT	102 102 102	231 235 234	£ £ £
54810		N/R		Digital,	Gate				STTL		
	030	N/R	N/R	1500 Ohm:	1500 Ohms 100E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13
54511		N/R		Digital,	Gate				STTL		
	030	N/R	χ 'Χ	1500 Ohms	is 100E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13
548112		N/R	•	Digital,	flip-flop				STTL		
	030	N/R	N/R		1500 Ohms 100E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13

- 1888 - 1888 - 1888	i	≥ @ 3 . ≠		geschiphien Bigital, date	(139 , Gate	!						I I
	So.	3	Test los Date Typ	Test lost lest Date Type Resistance	Test <u>nce Capacitance</u>	Num ance Put	Number Date Number Test Pulses Code <u>Devices Resu</u> l	nber Test f Zices Result V	Number Date Number Test fest P <u>ulses Code Devices Result Voltage Pin Combination</u>	Faiture I Criteria R	Trot Se Regarks Re	Setter at Remarks
	030	8/N 0	% N/R	1500 Ohins	ns 100E-12 F		1 N/R	1 FAILED	1000 N/R		252	13
§48135		8/8	-	Digital,	w	ect/Corr	rnor Detect/Correct, Parity/Carry Gen	Carry Gen		STTL		
	030	0 N/R	8/N 8/8	1500 Ohms	ns 100E-12	LL.	*/R	1 FAILED	1000 N/R	103	252	13
5-8138		œ	-	Digital, D	Decoder					S111		
	930	8/N (N/R	1500 Ohms	is 100E-12	ů.	1 N/R	1 FAILED	1000 N/R	103	252	5
	245	N/R	SS SS	100 Ohms	N/R		1 N/R	15 FAILED	40 INPUT(+) GND(-)	27	186	21
548140		α/ ν	•		Digital, Line/Bus Driver	river				STTL		
	030	N/N	N/R	1500 Ohms	100E-12	u_	1 N/R	1 FAILED	1000 N/R	103	252	13
548151		N /N	-		Digital, Mulciplexer	5				STTL		
	030	N/R	N/R	1500 Ohms	100E-12	u. .	1 N/R	1 FAILED	1000 N/R	103	252	13
548153		FSC	2		Digital, Multiplexer	۷				STTL		
	390	N/R	e C	1500 Ohms	100E-12	u_	5 N/R	1 PASSED	2000 S/R	105	242	11
548153		a/x	-	Digital,	Digital, Multiplexer	ړ				STTL		
	030	N/8	N/R	1500 Ohms	100E - 12	u_	N/R	1 FAILED	1000 N/R	103	252	13

Part Number	Part ESD Part Mfr Class Description			Technology		}
548157	-			STTL		
	Test Number Date		Test	Failure Test		General
	Sturce Date Type Resistance Capacitance Pulses Code De	Vevices Result v	FATIED 1100 INPITS(+) GROUND(-)	109		13
	0301 33 1000 Olinis 2005 12 1		888 INPUTS(+) GROUND(-)	109	144	13
			1138 INPUTS(+) GROUND(-)	109	144	13
		1 FAILED	988 INPUTS(+) GROUND(-)	109	144	13
548157	N/R 1 Digital, Multiplexer			STTL		
	030 N/R N/R 1500 Ohms 100E-12 F 1 N/R	1 FAILED	1000 N/R	103	252	13
548160	N/R 1 Digital, Counter/Divider			STTL		
	030 N/R N/R 1500 Ohms 100E-12 F 1 N/R	1 FAILED	1000 N/R	103	252	13
545161	N/R 1 Digital, Counter/Divider			STTL		
	030 N/R N/R 1500 Ohms 100E-12 F 1 N/R	1 FAILED	1000 N/R	103	252	13
500160	TEX 1 Digital Counter/Divider			STFL		
KO 1940						
	532 1086 SS 1500 Ohms 100E-12 F 1 N/R	5 FAILED	850 EACH PIN TO 8 & 16 (+ -)	19	252	13
545174	AMD 2 Digital, Flip-Flop			STTL		
	390 N/R GN 1500 Ohms 100E-12 F 5 N/R	1 PASSED	2000 S/R	105	247	Ξ
548174	TEX 2 Digital, Flip-Flop			STTL		
	390 N/R GN 1500 Ohms 100E-12 F 5 N/R	1 PASSED	2000 S/R	105	247	11

Source Date Type Resistance Capacitance Pulses Code Date Number Date Da				Technology STTI	2	1
N/R 1 Digital, TEX 1 Digital, N/R N/R 1500 Ohm N/R N/R 1500 Ohm N/R 1 Digital, N/R 1 Digital, N/R 1 Digital, N/R 1 Digital, N/R 1 Digital, N/R 1 Digital, N/R 1 Digital,	Number Date Number Pulses Code Devices 1 N/R	Test Test Result Volta FAILED 10	Test Voltage Pin Combination 1000 N/R	3 19 2	Test Gen <u>Remarks Rem</u> 252	General Remarks
TEX 1 Digital, N/R N/R 1500 Ohm N/R 1500 Ohm N/R N/R 1500 Ohm N/R 1 Digital, N/R 1 Digital, N/R 1 Digital, N/R 1 Digital, N/R 1 Digital, N/R 1 Digital, N/R 1 Digital,				STTL		
TEX 1 Digital, N/R N/R 1500 Ohm TEX 2 Digital, N/R 1500 Ohm N/R 1 Digital, N/R 1500 Ohm N/R 1 Digital, N/R 1500 Ohm N/R 1 Digital, N/R 1500 Ohm N/R 1 Digital,	1 N/R 1 E	1 FAILED 1	1000 N/R	103	252	13
N/R 1500 Ohms N/R 1500 Ohms TEX 2 Digital, N/R GN 1500 Ohms N/R 1 Digital, N/R 1 Digital, N/R 1 Digital, N/R 1 Digital, N/R 1 Digital, N/R 1 1500 Ohms N/R 1 1 Digital,	Logic Unit			STTL		
N/R 1 Digital, TEX 2 Digital, N/R GN 1500 Ohms N/R 1 Digital, N/R 1500 Ohms N/R 1 Digital, N/R 1 1500 Ohms N/R 1 1500 Ohms N/R 1 1500 Ohms N/R 1 1500 Ohms N/R 1 1500 Ohms	1 N/R 1 F.	1 FAILED 1	1106 N/R	102	189	13
N/R N/R 1500 Ohm: N/R GN 1500 Ohm: N/R N/R 1500 Ohm: N/R N/R 1500 Ohm: N/R N/R 1500 Ohm: N/R N/R 1500 Ohm: N/R N/R 1500 Ohm: N/R N/R 1500 Ohm:	Logic Unit			STTL		
<pre>TEX</pre>	1 N/R 1 F	1 FAILED 1	1000 N/R	103	252	13
N/R	Carry Generator			STTL		
N/R 1 Digital, N/R N/R 1500 Ohms N/R N/R 1500 Ohms N/R 1 Digital, N/R 1 Digital,	S N/R 1 PA	1 PASSED 2	2000 S/R	105	242	=
N/R N/R 1500 Ohms N/R N/R 1500 Ohms N/R 1 Digital,	Static			STTL		
N/R 1 Digital, N/R N/R 1500 Ohms N/R 1 Digital,	1 N/R 1 FA	1 FAILED 1	1000 N/R	103	252	13
N/R 1500 Ohms N/R 1 Digital,				STTL		
N/R 1 Digital,	T N/R T FA	1 FAILED 1	1000 N/R	103	252	13
d/N d/N				STTL		
¥ / •	1 N/R 1 FA	1 FAILED 1	1000 N/R	103	252	13

Part Number 54822		Part Mfr	ESU Class	Part <u>Description</u> 1 Digital, Gat	tion , Gate				Technology STTL	17	
	Test Source	9	Test Test Date Type	st Test be Resistar	lest Capacita	Number Date Pulses Code	Test Result	Test Voltage Pin Combination			General
	930	æ æ	α 2 α	2 1500 Ohms	ms 100E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13
5+8253		æ/x	•	, Digital,	, Multiplexer				STTL		
	030	N/R	α ×		1500 Ohins 100E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13
548257			-	l Digital,	, Multiplexer				STTL		
	030	X X	α 2		1500 Ohms 100E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13
548258		N/R	-	Digital,	, Multiplexer				STTL		
	030	Z/R	ж Х/8	л 1500 ОҺms	ms 100E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13
54\$280		ïEX	-	l Digital,	, Gate				STTL		
	436		0688 SS	1530 Ohr	1530 Ohms 100E-12 F	4 N/R	4 FAILED	500 INPUT TO OUTPUT	5	252	м
	736		1186 SS	1500 Ohms	ms 100E-12 F	5 N/R	5 FAILED	600 INPUT TO GND	īZ	252	м
545287		N/R	-	l Digital,	, Memory, PROM	_			STTL		
	030	×/8	R N/R	1500 Ohms	ms 100E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13
545288		N/R	•	i Digital,	, Memory, PROM	_			STTL		
	030	N/R	κ κ/κ	₹ 1500 ОҺтѕ	ms 100E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13

5 d. t. <u>Yurger (Cor</u> 5 45.283	(6)1(3)	7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	E80 CL185	Part Description Digital, Memory, PROM	HIOLY, PROM				Technology SIIL	7	ļ
	Source 436	. 9	Test Test Fest Date Type Rest 1186 SS 1500	Test <u>Resistance</u> 1500 Ohms	rest <u>Capacitunce P</u> 100E-12 F	Number Date Number Pulses Code Delices 4 N/R 2	oc Test To Ces Result Vo 2 FAILED	Number Test Test <u>Delices Result Voltage Pin Combination</u> 2 FAILED 500 INPUT TO OUTPUT	failure Te <u>Criteria Re</u> 5	Test Gen Remarks Rem 252	Generat <u>Remarks</u> 3
54830	030	N/N N/N	N X X	Digital, Ga 1500 Ohms	ate 100E-12 F	1 N/R	1 FAILED	1000 N/R	STTL 107	252	13
54832	030	N/R N/R	Z X	Digital, cate 1500 Ohms 100	ite 100E-12 F	1 N/R	1 FAILED	1000 N/R	STTL 103	252	51
54832	135	1186	1 6 SS	Digital, Sate 1500 Ohms 100	ite 100E-12 F	3 N/R	2 FAILED	400 INPUT 10 OUTPUT	577L 5	252	٣
, , , , , , , , , , , , , , , , , , ,	030	8/8 8/8	N/N	Digital, Me 1500 Ohms	Memory, PROM ; 100E-12 F	1 N/R	1 FAILED	1000 N/R	STTL 103	252	13
548472	030	N/R N/R	1 N/R	Digital, Memory, PROM 1500 Ohms 160E-12 F	тогу, РКОМ 1006-12 F	1 N/R	1 FAILED	1000 N/R	STTL 103	252	13
54551	030	8. N 8. N 8. N	N/R	Digital, Gate 1500 Ohms 100	ite 100E-12 F	N/N	1 FAILED	1000 N/R	STTL 103	25,7	13
545573	030	N/R N/R	- α α	Digital, Me 1530 Ohms	emory, PROM 100E-12 F	N/R	1 FAILED	1000 N/R	STTL 103	252	13

23.60	000 1 1 EV		11 12 12							
¥.unber		7 5 3	Description		;		***	Yearnound:	Υ	
5.504	NSC		Digital, Site	٠.						
	lest fest	Test Test Tost		Test	Number Date Number	150	1004	fulure Test		Sererat
	Source Date	Type	Resistance	Capaci tance	Pulses Code Dev	Result	Voltage Pin Gempindtion	Criteria Remarks	marks Re	Remarks
	392 1386 SS 1580 Ohms	S.S.	1500 Ohms	100E-12 6	#/x		(· +) *:		252	5
548734	NON	-	Digital, Me	Memory, RAM, Dynamic	ynamı c			STTL		
	+36 1186	ŞŞ	1500 Ohms	100E-12 F	8 N/R	1 FAILED	900 INPUL TO GND	5	252	~
	+35 1186 SS		1500 Ohms	100E-12 F	11 N/R	1 641260	1400 ENPUT TO GND	5	252	~
54874	N/R	-	Digital, Fl	Flip-Flop				STTL		
	030 N/R	<u> </u>	1500 Ohms	100E-12 F	N/8	1 FAILED	1000 N/R	103	252	13
54885	N/R	-	Digital, Ar	ithmetic, Mag	Arithmetic, Magnitude Comparator	tor		STTL		
	030 N/R	χ χ	N/R 1500 Ohms	100E-12 F	1 N/R	1 FAILED	1000 N/R	103	256	13
54586	N/R	-	Digital, Ga	Gate				STTL		
	030 N/R	N/R	N/R 1500 Ohms 100E-12 F	100E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13
	:							-		
55107	X X	~	Digital, Li	Line/Bus Receiver	ver			Bipolar		
	245 N/R	SS	100 Ohms	N/R	1 N/R	15 FAILED	41 INPUT(+) INPUT(-)	27	186	21
(·	:									
401 cc	χ 2	~	Digital, Li	Line/Bus Driver	Ĺ			Bibotar		
	245 N/R	SS	100 Ohms	α ,	1 N/R	15 FAILED	84 INPUT(+) GND(-)	25	186	21

Part Number 55113		Part E	ESD Class	Part Descripti	no.	i,			Technology	λB	1
51166		- X	V	Uigitat, t	Line/Bus Driver				Bipolar		
	Tes	Test Test	Test	Test Test	Test	Number Date Number		Test	Failure Test	est Ge	General
	390	rce Date	8 2 3 8	390 N/R GN 1500 Ohms	Capacitance 100E-12 F	Pulses Code Devices Result 5 N/R 1 PASSED		Voltage Pin Combination 2000 S/R	Criteria Remarks 105 247	emarks Re 247	Remarks 11
55116		164	~		roving Prince						
<u> </u>		Y	1		rine/ bus of iver				Bipolar		
	390	N/R	3	1500 Ohms	100E-12 F	5 N/R	1 PASSED	2000 S/R	105	247	1
	436	1186 SS	SS	1500 Ohms	100E-12 F	18 N/R	1 PASSED	4000 N/R	5	252	m
55114		SS	•	Digital	line/Rus Oriver				9		
		3	-						sipotar		
	436	1186 SS	SS	1500 Ohms	100E-12 F	14 N/R	1 FAILED	2000 INPUT TO OUTPUT	5	252	٣
55326		TEX	2	Digital,	Line/Bus Driver				Bipolar		
	390	Z/R	S	1500 Ohms	100E-12 F	S N/R	1 PASSED	2000 S/R	105	252	11
55327		ŢĔ	2	Digital, I	Line/Bus Driver				Bipolar		
	390	N/R GN	S.	1500 Ohms	100E-12 F	5 N/R	1 PASSED	2000 S/R	105	247	11
55454		TEX	-	Digital, L	Line/Bus Driver				Bipolar		
	736	1186 SS	SS	1500 Ohms	100E-12 F	11 N/R	1 FAILED	1400 INPUT TO GND	5	252	8
55461		N/R	2	Digital, L	Digital, Line/Bus Driver				Bipolar		
	030	X X	χ «/	N/R 1500 Ohms	100E-12 F	1 N/R	1 FAILED	3000 N/R	103	252	13

Part			ESD	Part					-		
55462		E 2	2	Digital,	on Line/Bus Oriver				Bipolar		ļ
	Test	t Tes	t Tes	Test Test Test	Test Numbe	Number Date Number	Test	Test	Failure Test		General
	Soul	rce Dat	e Typ	e Resistance	Capacita	es Code Devices	es Result Vo	Result Voltage Pin Combination			Remarks
	030	N/R	X/X	1500 Ohms	100E-12 F	1 N/R	1 FAILED	3000 N/R	103	252	13
55463		N/R	2	Digital,	Line/Bus Driver				Bipolar		
	030	N/R		N/R 1500 Ohms 100E-12	100E-12 F	1 N/R	1 FAILED	3000 N/R	103	252	13
55464		N/R	2	Digital,	Line/Bus Driver				Bipolar		
	030	N/R	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED 1 FAILED	3000 N/R 3000 N/R	103	252 252	13
555		816	 -	Linear					Bipolar		
	920	0178	8 SS	100 Ohms	200E-12 F	1 N/R	4 FAILED	296 N/R	9	285	13
555		N/R	1	Linear					Bipolar		
	030	N/R		N/R 1500 Ohms	100E-12 F	1 N/R	1 FAILED 1 FAILED	1700 N/R 1700 N/R	103 103	252	13
556		N/N	-	Linear					Bipolar		
	030	N/R		N/R 1500 Ohms	100E-12 F	1 N/R	1 FAILED	1700 N/R	103	252	13
5710		816	3	Linear,	Comparator				111		
	050	N/R		N/R 1500 Ohms	100E-12 F	1 N/R	1 FAILED	6910 N/R	102	188	13

Part Number 573		Part ESD Mfr Class VAR 2	Part Descript Digital,	ion Latch				Technology Bipolar	λb	
	Test	t Test Test	t Test	Test	Number Date Number	Fest	Test	Failure 1	lest G	General
	Source	0	Date Type Resistance	ce Capacitance s 100F-12 F	Pulses Code	Devices Result V	Voltage Pin Combination	Criteria Ro	Remarks Re	Remarks 13
	757	0983	1500 Ohms				PINS 4,5,6, AND	97	149	13
	753	0983 SS	0 Ohms	s 0	8 N/R	3 FAILED	1000 N/R	111	252	4
	423	0983 SS	0 Ohms	s 0 F	10 N/R	2 FAILED	1250 N/R	111	252	4
	423	0983 SS	0 Ohms	s 0	12 N/R	10 FAILED	1500 N/R	111	252	7
5845		M01	Linear,	Voltage Reference	ence.			Bipolar		
	736	1186 SS	1500 Ohms	s 100E-12 F	11 N/R	1 FAILED	1400 : NPUT TO GND	50	252	23
5116		101	Digital,	Memory, RAM,	, Static			SOWO		
	436	0588 SS	1500 Ohm:	1500 Ohms 100E-12 F	5 8746	1 FAILED 1 FAILED 1 FAILED	600 1NPUT TO OUTPUT 600 1NPUT TO COMMON 600 1NPUT TO OUTPUT	N N N	252 252 252	ммм
	436	0588 \$\$	1500 Ohms	s 100E-12 F	10 8746	1 FAILED	1200 INPUT TO COMMON	2	252	~
	736	0588 SS	1500 Ohms	s 100E-12 F	11 8746	1 FAILED	1400 INPUT TO COMMON	ĸ	252	m
	436	0588 88	1500 Ohms	s 100E-12 F	12 8746	1 FAILED	1500 INPUT TO COMMON	\$	252	٣
6116590		, 101	Digital,	Memory, RAM,	, Static			CMOS		
	390	0184 SS	1500 Ohms	s 100E-12 F	1 N/R	1 FAILED	750 N/R	102	252	13
63983		₩SC 1	Digital,	Memory, RAM				SOWJ		
	393	0383 SS	1500 Ohms	s 100E-12 F	1 N/R	1 FAILED	1000 N/R	102	252	13

į	Part ESD Mfr Class VAR 2	Part Descripti Digital,	nory,	RAM, Static	0.1			Technology	76	1
Test Test Tes Source Date TYS 424 0983 SS	οKiè	st Test De Resistand 1500 Ohms	Test <u>Capacitance</u> 100E-12 F		Number Date Number Pulses Code Devices 2 N/R 4	Test Result FAILED	Voltage Pin Combination 250 PIN 13	Failure Test Criteria Rema	rks 149	General Remarks 13
0983	SS	1500 Ohms	100E-12	u.	1 N/R	4 FAILED	250 PIN 13	97	149	13
0983	SS	1500 Ohms	100E-12	u.	4 N/R	7 FAILED	500 PIN 13	97	149	13
0983	SS	0 Ohms	0	u.	6 N/R	5 FAILED	750 PINS 1-3, AND 15-17	95	252	7
0983	SS	0 Ohris	0	u.	S N/R	4 FAILED	43000 PINS 1-3 AND 15-17	97	252	4
0983	SS	O Ohms	0	u.	7 N/R	6 FAILED	43000 PINS 1-3 AND 15-17	97	252	4
NSC		2 Digital,	Memory, RAM, Static	AM, Stati	<u>u</u>			CMOS		
0681	N 5	1000 Ohms	200E - 12	ш.	5 N/R	2 PASSED	250 LID TO ALL PINS	. 57	09	13
0681	NS	1000 Ohms	200E - 12	u.	5 N/R	2 PASSED	500 LID TO ALL PINS	22	09	13
0681	S	1000 Ohms	200E-12	u.	5 N/R	2 PASSED	1000 LID TO ALL PINS	57	09	13
0681	8	1000 Ohms	200E - 12	ιL	5 N/R	2 FAILED	2000 LID TO ALL PINS	25	09	13
0681 GN	3	1000 Ohms	200E-12	L.	S N/R	2 FAILED	4000 LID TO ALL PINS	25	09	13
NON NO	•	l Digital,	Memory, RAM,	AM, Static	j			CMOS		
067	ss 6290	1500 Ohms	100E-12	u.	1 N/R	1 FAILED	1500 N/R	87	252	13
RCA		Digital,	Memory, R	RAM, Static	Ü			CMOS		
SS 6290	SS	1500 Ohms	100E-12	u	1 N/R	1 FAILED	1400 N/R	78	252	13

Part Number		Part E	ESD		uo				Technology	χb	[
6518		N/R	-	Digital, M	Memory, RAM,	Static			CMOS		
	Test	Test	Test	Test Test		Number Date	Test				General
	Sour	Source Date	Z S	Type Resistance	Capacitance	Pulses Code	Devices Result	Voltage Pin Combination	Criteria R	Remarks R	Remarks
	980	¥ L	2		71, 2, 11	200		K (2)	2	363	2
6561		HAR	-	Digital, M	Memory, RAM				CMOS		
	393	0881 SC	S	1500 Ohms	100E-12 F	1 N/R	1 FAILED	2000 N/R	102	252	13
7599		ISL	-	Digital, M	Memory, PROM				CMOS		
	393	1182 SS	SS	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1500 N/R	102	252	13
9800		N/R	-	Digital, P	Processing Unit, Central	it, Central			SOWN		
	030	N N	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED 1 FAILED 1 FAILED	1000 N/R 1000 N/R 1000 N/R	103 103 103	252 252 252	ឯឯឯ
									1		?
98000		VAR	8	Digital, P	Processing Unit, Central	it, Central			NMOS		
	727	1283 SS	SS	1500 Ohms	100E-12 F	1 N/R	1 FAILED	250 PINS 17 AND 18	100	149	13
	727	1283	SS	1500 Ohms	100E-12 F	4 N/R	S FAILED	500 PINS 17 AND 18	100	149	13
	727	1283	SS	1500 Ohms	100E-12 F	3 N/R	5 FAILED	500 PINS 17 AND 18	100	149	13
	727	1283	SS	1500 Ohms	100E-12 F	6 N/R	1 FAILED	750 PINS 17 AND 18	100	149	13
	727	1283	SS	1500 Ohms	100E-12 F	5 N/R	3 FAILED	750 PINS 17 AND 18	100	149	13
	423	1283 SS	SS	O Ohms	0 F	9 N/R	2 FAILED	1250 PINS 10 AND 12	100	252	4

Part	(Cont'd)	Part ESD Mfr Class			ion]; 	-			Technology	76	
00089		VAR	<u>م</u>	Digital,	Procest	Processing Unit, Central	, Central			00 E		
	rest	Test	est I	est			umber Date	Number Test				General
	Source 423	<u>Date</u> 1283	SS 0	Resistance O Ohms		Capacitance Pu 0 F	Pulses Code 17 N/R	Devices Result 3 FAILED	Voltage Pin Combination 2250 PINS 10 AND 12	100	252	4
	753	1283 S	ss 0	Ohms	0	u.	19 N/R	1 FAILED	2500 PINS 10 AND 12	100	252	4
	423	1283 S	o ss	Ohms	0	u.	22 N/R	5 FAILED	2750 PINS 10 AND 12	100	252	4
	453	1283 \$	o ss	Ohms	0	u <u>.</u>	21 N/R	3 FAILED	2750 PINS 10 AND 12	100	252	4
	423	1283 S	o ss	Ohms (0	LL.	24 N/R	1 FAILED	3000 PINS 10 AND 12	100	252	4
98000		TRU	1 0	Digital,	Process	Processing Unit, Central	, Central			SOMH		
	736	1186 SS		1500 Ohms	100E-12	-12 F	15 N/R	1 FAILED	2500 INPUT TO GND	5	252	M
	736	1186 S	SS 1	1500 Ohms	100E-12	-12 F	12 N/R	1 FAILED	1500 INPUT TO GND	5	252	3
	736	1186 SS		1500 Ohms	s 100E-12	-12 F	16 N/R	1 FAILED	3000 INPUT TO OUTPUT	5	252	2
6802		N/R	-	Digital,	Proces	Processing Unit, Central	, Central			NMOS		
	030	N/R	N/R 1	1500 Ohms	s 100E-12	-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13
6821		N/R	۳-	Digital,	Proces	Processing Unit, Central	, Central			SOWN		
	030	N/R	N/R	1500 Ohms	ıs 100E-12	-12 F	1 N/R	1 FAILED 1 FAILED	1000 N/R 1000 N/R	103 103	252 252	13 13
6828		N/R	-	Digital,	Proces	Processing Unit,	, Central			SOWN		
	030	N/R	N/R	1500 Ohms	s 100E-12	-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13

Part Number		Part 6	ESD Class	Part Description	_				yaoloudoot	>	
584.↓			_	Digital,	Processing Unit, Central	t, Central			NMOS		1
	Sour	91	t Test <u>! Iype</u>	stance	Test <u>Capacitance</u>	4. 4.1	Test Result	Test Voltage Pin Combination			General Remarks
	030	X / X			100E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13
6845		N/R	-	Digital, Pr	Processing Unit, Central	t, Central			NMOS		
	030	N/R	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13
6850		N/R	-	Digital, Pr	Processing Unit, Central	:, Central			SOMN		
	030	N/N		N/R 1500 Ohms	100E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13
6875		N/R	-	Digital, Pro	Processing Unit, Central	c, Central			NMOS		
	030	N/R	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13
7040		۲ ۲	2	Digital, Mer	Метогу, EAROM				SONW		
	383	N/R	SS	1500 Ohms	100E-12 F	1 N/R	1 FAILED 1 FAILED 1 FAILED	2308 DO4(1D)(+) APTT(-) 128398 AO(-) APTT(+) 27769 VSS(-) APTT(+)	67 67	188 188 188	∞ ∞ ∞
402		FSC	~	Linear, Ope	Linear, Operational Amplifier	ifier			Bipolar		
	029		N/R N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED 1 FAILED	1984 N/R 1565 N/R	102 102	189	13
70097		N SC	-	Digital, Inv	nverter, Buffer	£ .			CMOS		
	393	0285 SS	SS	1500 Ohms	100E-12 F	1 N/R	2 FAILED	1000 4(INPUT) 5(OUTPUT)	102	252	13

	• •	183 13	252 13	r 285 13	252 13		186 21	000	ar 3 252 13
		in Sylvin	MOS 13	Bipolar 10	-: 19	Bipolar 193	47		Bipotar 103
		15546 h/R	1030 PINS 1,6,AND 7	273 V(-)(5)(+) VREF(4)(-)	1500 PINS 2-6,9,11,13 TO 7,12(+-	1039 N/R 1030 N/R	50 INPUT(+) INPUT(-)	53665 1478	1500 N/R
	Number Date Names Tong Putses Gode Devices Regards 1 N/R REFEREN	1 FAILED	10 FAILED	4 FAILED	5 FAILED	1 FAILED		1 FAILED	1 FAILED
	Number Date Numbers Pulses Cade Devices 1 N/R	tier 1 N/R	5 N/R	1 N/R	1 N/R		1 N/R	ifier 1 N/R	1 N/R
Part ass Description Linear, Comparator	st Test Test <u>Resistance Capacitance</u> 100 Ohms 200E-12 F	3 Linear, Operational Amplifier N/R 1500 Ohms 100E-12 F	1 Digital, Memory, Bubble GN 1500 Ohms 100E-12 F	1 Linear, Voltage Regulator SS 100 Ohms 200E-12 F	ss 1500 Ohms 100E-12 F	1 Linear, Voltage Regulator N/R 1500 Ohms 100E-12 F	SS 100 Ohms N/R	N Linear, Operational Amplifier N/R 1500 Ohms 100E-12 F 1	1 Digital, Multivibrator N/R 1500 Ohms 100E-12 F
Part ESD M+r Class	t test Tes 202 <u>Date Typ</u> 0178 SS	FSC N/R	INT N/R	FSC 0178	SS 9860	α × α ×	N/R	TEX V/R	N/R N/R
	7es: <u>Source</u> 026	020	827	026	392	030	572	620	23.0
Part Number 710		515	7220	723		723		72709	733

	General <u>Remarks</u> 13	13	13	13	13	13	13	13
75	Test Ger Remarks Red 252	188	188	204	188	188	188	252
Technology Bipotar	Failure Te Criteria Re 103	81FET 102	TTL 102	19	11L 102	17.L 102	TTL 102	111.
	Voltage Pin Combination 1500 N/R	14270 N/R	3234 N/R	2000 INPUT TO GND.	2460 N/R	4401 N/R	9032 N/R	1500 N/R
	Test Result FAILED	1 FAILED	1 FAILED	3 FAILED	1 FAILED	1 FAILED	1 FAILED	5 FAILED
	Number Datc Number Pulses <u>Code Devices</u> 1 N/R	ifier 1 N/R	1 N/R	30 N/R	1 N/R	1 N/R	1 N/R	30 N/R
Part <u>Sescription</u> Digital, Multivibrator	Test Test Test Test Test Source Date Type Resistance Capacitance POSO N/R N/R 1500 Ohms 100E-12 F	3 Linear, Operational Amplifier N/R 1500 Ohms 100E-12 F	1 Digital, Gate R 1500 Ohms 100E-12 F	1500 Ohms 100E-12 F	2 Digital, Gate N/R 1500 Ohms 100E-12 F	3 Digital, Gate R 1500 Ohms 100E-12 F	3 Digital, Gate R 1500 Ohms 100E-12 F	1 Digital, Gate 1500 Ohms 117E-12 F
Part ESD Mfr Class N/R 1	Test Te Date IX N/R N/	FSC N/R N/	SC 1 N/R N/R	0986 SS	×	/R //	π /×	/R 1 N/R SS
(Cont'd) Mf	Test Test Source Date 030 N/R	FS 029	FSC 029 N	426	MOT 029 N,	1EX 029 N	918 /N 620	N/R 028 N,
Part Number 733		072	2400		2400	2400	2400	7400

	Part ESD Mfr Clas	SIN	Part Description Digital, Gat	ion Gate				Technology		ļ
Test Source 029	Test Test Source Date 029 N/R N	Test Type N/R	Test <u>Resistance</u> 1500 Ohms	Test Capacitance 100E-12 F	unber Date N ulses Code C 1 N/R	Number Date Number Test T <u>Pulses Code Devices Result V</u> 1 N/R 1 FAILED	Date Number Test Test <u>Code Devices Result Voltage Pin Combination</u> N/R 1 FAILED 5485 N/R	Failure Test General Criteria Remarks Remarks 102 188 13	st Ger marks Rei 188	General Remarks 13
, F	FSC 1	, ss	Digital, (Digital, Gate 1500 Ohms 100E-12 F	30 N/R	3 FAILED	2000 INPUT TO GND.	11L 61	504	13
030	N/R N/R	2 N/R	Digital, I	Inverter, Buffer 100E-12 F	ت 1 N/R	1 FAILED	2500 N/R	77L 103	252	13
927	FSC 0686	SS	Digital, 11 1500 Ohms	Inverter, Buffer : 100E-12 F	:r 30 N/R	3 FAILED	2000 INPUT TO GND.	11L 61	204	13
030	N/R N/R	2 N/R	Digital, 1500 Ohms	Digital, Line/Bus Driver 1500 Ohms 100E-12 F	1 N/R	1 FAILED	2500 W/R	17L 103	252	13
030	N/R N/R	2 × × × × × × × × × × × × × × × × × × ×	Digital, L 1500 Ohms	Line/Bus Driver , 100E-12 F	1 N/R	1 FAILED	2500 N/R	TTL 103	252	13
	FSC	_	Linear, C	Operational Amplifier	lifier			Bipolar		
029	N /R	N/R	1500 Ohms	3 100E-12 F	1 N/R	1 FAILED	5958 N/R	102	188	13
054	0181 SS	SS	1500 Ohms	s 100E-12 F	1 N/R	2 FAILED	1000 EACH PIN	51	171	13

		101 FSD	1.1.6							
(0,100) Jaging	ı	MATC C. d.S.						Technology	£6	
Ţ		FSC 1	Elmean, dps	Operational Amplifier	Lifter			Bipolar		!
	1881	Test Test	: Text	Test	Number Date Number	lest	Test	Failure Test		i energia i
	Sour	Source Date Type	Resistance	Capacitance	Pulses Code D	Result	Voltage Pin Combination	Criteria Re	ر يد	National Action
	020	3178 SS	100 Ohms	200E-12 F	× ×	FAILED	315 OFF NULL(5)(+) V(-)(4)			5.
	138	0880 SS	1500 Ohms	125E-12 F	1 N/R	100 FAILED	500 NON-INVERTING INPUT	22	252	13
	ر ق	0880 ss	1500 Ohms	125E-12 F	2 N/R	100 FAILED	750 INVERTING INPUT	22	252	13
	න • -)380 SS	1500 onms	1256-12 в	α/Z	190 FAILED 100 FAILED	1250 FOSTITVE NULL 1250 NEGATIVE NULL	22	25 <i>2</i> 252	£ £1
	9	0880 55	1500_Ohms	125E-12 F	S N/R	100 FAILED	5000 NEGATIVE SUPPLY	22	252	\$
						100 FAILED	5000 POSITIVE SUPPLY	22	252	13
						100 FAILED	5000 0012901	22	252	13
, , ,		> :	linear, Ope	Operational Amplifier	after.			Bipotar		
	7 8	0181 55	150J Ohms	1906 12 F	1 N/R	2 FAILED 2 FAILED	1009 EACH PIN 2000 EACH PIN	51	171	13
7.1		MOT 1	Linear, Ope	Operational Amplifier	ifier			Bipolar		
	054	0181 SS	1500 Ohms	100E-12 F	1 N/R	2 FAILED	1050 EACH PIN	51	171	13
74.1		N/R 2	Linear, Ope	Operational Amplifier	ifier			Bipolar		
	030	N/R N/R	1500 Ohms	100E-12 F	I N/R	1 FAILED 1 FAILED	2500 N/R 2500 N/R	103	252 252	52 52
	020	0730 GN	1500 Ohms	125E-12 F	1 N/R	15 FAILED	500 OFFSET(+) APTI(-)	. 56	252	13
	419	0880 88	1500 Ohms	125E-12 F	1 N/R	23 FAILED	1250 INVERTING INPUT	22	252	13

į	General Renarks 13	<i>?</i>		*^	13	13		13		13		13		13		13
	st 66 marks <u>Re</u> 252	ĝ		5.55	252	252		171		504		504		252		252
38.00%	Faiture Test Cri <u>teria Remarks</u> 22 252		Ĉ.	22	22	22 22	Bipolar	51	111	61	111	61]] }:: }::	103	111	103
	Veitige Pig Cambination		(19.80 (8.18 + 8.18 8 8))	INAM BRICEPHIA NA COL	S. V. N.N. INVERTING INPUT	1937 INVERTING INPUT		2000 EACH PIN		2020 INPUT TO GND.		2000 INPUT TO GND.		25J0 4 /R		2500 4/R
	Test Resquit FAILED	C	्र स्ट		S EATLED	6 FALLED 19 FAILED		2 FAILED		3 FAILED		3 FAILED		1 FAILED		1 FAILED
\$ • •		γ 2	* *	8/3	3 × × × × × × × × × × × × × × × × × × ×	1 N/R	liffer	1 N/R		30 8625		30 8613	£.	1 4/8	7.	4/N
Control (1) West of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of t	fest Test Test Test Test Number Duter S <u>turce Duter Type Resistance Cipullinnse Pullons Cide</u> 419 (188) SS (180) Chima (1256 12 F) Resistance Cipulinns (188) SS (180) Chima (1866 12 F) Resistance Cipulinns (1880 188) SS (180) Chima (1886 18 F) Resistance Cipulinns (1880 1880 1880 1880 1880 1880 1880 188	1.21.355° 2000 558° 88° 89° 90°	- 51 355 Name 1555 - 58 58 615	419 - 3880 SS - 1500 Ohais - 125E+12 F	419 (1882 SS 1500 Ohms 125E-12 F	419 3883 \$\$ 1500 Cams 125E-12 F	RAY ' Linear, Operational Applifier	354 3181 SS 1500 Ohms 100E-12 F	FSC 1 Digital, Gate	426 0786 SS 1500 Ohms 100E-12 F	6SC ' Digital, Gate	+26 3796.53 1500 Ohms 100E-12 F	N/8 2 Digital, Lim-/Bus Driver	35) 4/8 4/8 1500 Ohins 100E-12 F	W.P. 2 Sigital, Line/Bus Driver	133 - N/R - N/R - 1500 - 00ms - 100E - 12 - E
Fort. <u>(Cont.</u> (a)							17. 17.		7413		72.11		74120		g5145	

Part		Part E	ESO	Part Descript	C						
213			3	Digital,	Gate, NAND, S	Gate, NAND, Schmitt Trigger			TIL TIL	760	
	Test	t Test rce Date	Test Test Test Date Type Resis	Test Test Test Test Source Date Type Resistance	Test P Capacitance	Number	•	Test	Failure 1		General
	020	¥ 8	N/R	1500 Ohms			1 FAILED	7441 N/R	102 Remarks 102 188		Remarks 13
74132		FSC	-	Digital, I	Multivibrator				111		
	756	0986 SS	SS	1500 Ohms	100E-12 F	30 8613	3 FAILED	2000 INPUT TO GND.	61	204	13
7414		FSC	-	Digital, P	Multivibrator				11.		
	759	9860	SS	1500 Ohms	100E-12 F	30 8633	3 FAILED	2000 INPUT TO GND.	61	504	13
74151		FSC	-	Digital, N	Multiplexer				17.1		
	759	0686 SS	SS	1500 Ohms	100E-12 F	30 8552	3 FAILED	2000 INPUT TO GND.	61	507	13
74153		FSC		Digital, M	Multiplexer				11.		
	759	08 86 SS	SS	1500 Ohms	100E-12 F	30 8624	3 FAILED	2000 INPUT TO GND.	61	504	13
74154		N/R	2	Digital, D	Decoder				11.		
	030	N/R	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	2500 N/R	103	252	13
74157		FSC	-	Digital, M	Multíplexer				111		
	759	0786 SS		1500 Ohms	100E-12 F	30 8621	3 FAILED	2000 INPUT TO GND.	19	504	13
74163		TEX	5 (Digital, C	Counter/Divider	.			111		
	620	N/R	Z/R	N/R N/R 1500 Ohms	100E-12 F	Z /Z	1 FAILED	3733 N/R	102	188	13

-	General	Remarks	13	13	13	13	13	13	13	13	13	13	13	13	13	13		13		13	£ £ £	ξį
2			215	252	216	214	252	213	252	212	252	226	213	252	225	252		504		252	252 252 252	252
Technology	Failure Te	Criteria Remarks	108	108	108	108	108	108	108	108	108	108	108	108	108	108	11	61	111	108	108 108	108
	Test	Voltage Pin Combination	300 IN.(6)(+) GND(8)(-)	500 IN.(6)(+) GND(8)(-)	300 IN.(6)(+) GND(8)(-)	200 IN.(6)(+) GND(8)(-)	200 IN.(6)(+) GND(8)(-)	100 IN.(6)(+) GND(8)(-)	200 IN(2,6,10)(+) GND(-)	200 IN.(2,6)(+) GND(8)(-)	300 IN.(2,6)(+) GND(8)(-)	100 IN.(10)(+) GND(8)(-)	100 IN.(6,10)(+) GND(8)(-)	200 IN.(2,6)(+) GND(8)(-)	100 IN.(6)(+) GND(8)(-)	100 IN(2,6,10)(+) GND(-)		2000 INPUT TO GND.		500 IN(7,11,15)(+) GND(-)	500 IN(7,11,15)(+) GND(-) 400 IN.(7)(+) GND(8)(-) 500 IN.(7)(+) GND(8)(-)	300 IN(7,11,15)(+) GND(-)
	Test	Result	1 FAILED	1 FAILED	FAILED	2 FAILED	3 FAILED	2 FAILED	1 FAILED	1 FAILED	1 FAILED	2 FAILED	1 FAILED	1 FAILED	1 FAILED	4 FAILED		3 FAILED		3 PASSED	3 PASSED 1 FAILED 1 FAILED	4 FAILED
	Number Date Number	Pulses Code Devices	1 N/R			1 N/R		1 N/R				1 N/R				1 N/R		30 N/R		1 N/R	1 N/R	1 N/R
Fart Description Digital, Counter/Divider	Test	Resistance Capacitance P	Ohms N/R			Ohms 120E-12 F		Oh.18 510E-12 F				Ohms .01E-07 F				Ohms .01E-06 F	al, Register, Shift	Ohms 100E-12 F	al, Flip-Flop	Ohms N/R	Ohms 120E-12 F	Ohms 510E-12 F
Fart Descript Digital,	Test Test	Resis	0			0		0				0				0	Digital,	1500 Ohms	Digital,	0	0	0
ESD Class	Test	Type	SS			SS		SS				SS				SS	-	SS	-	SS	SS	SS
Part ESD Mfr Clas	Test	Source Date	N/R			N/R		N/R				N/R				N/R	FSC	0686	N/R	N/R	X X	N/R
(Cont'd)	Test	Source	234			235		236				237				238		927	_	234	235	236
Part Number (Con 74163																	74164		74173			

Part	(Centid)	Part 650	6.50 Class	Part Description	e e						Technology	λbo	
2.1.3			-	Digital,	1.	flip-Flop					Ē	· · · · · · · · · · · · · · · · · · ·	
	fest		Test	Test Test Test	-	Test	Number Date Number	Test	Test		Failure	lest	heneral
	Source	ce Date	Date Type	Resistance		Capacitance	Pulses Code D	Devices Result	Voltage	e Pin Combination	Criteria	Remarks	Remarks
	236		SS	0 Ohms		510E-12 F	1 N/R	1 FAILED		200 IN.(11)(+) GND(8)(-)	108	228	13
	237	N/R	SS	0 Ohms		.01E-07 F	1 N/R	1 FAILED		403 IN(7,11,15)(+) GND(-)	108	252	13
								2 FAILED		300 IN(7,11,15)(+) GND(-)	108	252	13
								2 FAILED	30	300 IN.(7)(+) GND(8)(-)	108	252	13
	238	2	SS	Ohms		.01E-06 F	1 N/R	1 FAILED	10	100 IN.(11.15)(+) GND(-)	108	217	13
								1 FAILED		100 IN.(11)(+) GND(8)(-)	108	252	13
								1 FAILED		100 IN.(7)(+) GND(8)(-)	108	554	13
								1 FAILED	20	200 IN.(7)(+) GND(8)(-)	108	252	13
ř		i,	(-							
(417)		NSC	~	Digital,		Flip-Flop					7		
	127	N/R	SS	1000 Ohms		200E-12 F	1 N/R		140	1400 INPUTS(+) GROUND(-)	3	252	13
								1 PASSED	150	1500 INPUTS(+) GROUND(-)	2	252	13
	127	N/R	SS	1000 Ohms		200E-12 F	10 N/R	2 PASSED	150	1500 INPUTS(+) GROUND(-)	M	252	13
74175		TEX	~	Digital,		Flip-Flop					111		
	127	χ ×	SS	1000 Ohms		200E-12 F	1 N/R	1 FAILED 1 PASSED	150 150	1500 INPUTS(+) GROUND(-) 1500 INPUTS(+) GROUND(-)	мм	252 252	£1 £1
	127	N/R	SS	1000 Ohms		200E-12 F	10 N/R	1 FAILED	150	1500 INPUTS(+) GROUND(-)	€ 1	252	13
								1 PASSED	150	1500 [NPUTS(+) GROUND(-)	\$	252	13
74175		FSC	-	Digital,		Flip-Flop					111		
	927	0786 ss	SS (1500 Ohms		100E-12 F	30 N/R	3 FAILED	200	2000 INPUT TO GND.	61	204	13
74182		Z/R	2	Digital,		Arithmetic, Ca	Carry Generator				116		
	030	N/R	N/R	1500 Ohms		100E-12 F	1 N/R	1 FAILED	250	2500 N/R	103	252	13

Part Number		Part ESD Mir. Clay	ES0 Class	Part Description	Counter/Divider	dor			Technology	7	1
· ·	,	، ر	-	, in			;	•	9	10. +	100000
	Sourc	Test Test Test Test Source Date Ivoe Rest	I voe	Test Test Test Test Source Date Type Resistance	lest Pe Capacitance	Number Date Pulses Code	Result	rest Voltage Pin Combination		\ \ \	Remarks
	927	1086 SS	SS	1500 Ohms	, 100E-12 F	30 8634	FAILED	2000 INPUT TO GND.	19	507	13
7420		FSC		Digital,	6.91.0				11 L		
	927	0636	SS	1500 Ohms	1500 Ohms 100E-12 F	30 8613	3 FAILED	2000 INPUT TO GND.	61	507	13
7425		χ γ	2	Digital,	Gate				111		
	030	N/R	χ	1500 Ohm	N/R 1500 Ohms 100E-12 F	1 N/R	1 FAILED	2500 N/R	103	252	13
7+32		FSC	-	Digital,	Gate				111		
	527)786 \$\$	SS	1500 ОҺт	s 100E-12 F	30 8621	3 FAILED	2000 INPUT TO GND.	61	504	13
7437		8/N	2	Digital,	Gate				11 11		
	030	۵ ۲	N/R	1500 Ohms	s 100E-12 F	1 N/R	1 FAILED	2500 N/R	103	252	13
	190	2/2	₹ R	0 Ohms	N/N	1 N/R	1 FAILED	750 INPUT	102	252	٥
	890	ν/κ	α / z	0 Ohms	s 100E-12 F	1 N/R	1 FAILED	475 INPUT	102	252	٥
	690	W/N	α/χ	0 Ohms	s 15UE-12 F	1 N/R	1 FAILED	400 INPUT	102	252	٥
	070	N/R	N/R	0 Ohms	\$ 200E-12 F	1 N/R	1 FAILED	300 INPUT	102	252	٥
7438		N/R	2	Digital,	Gate				116		
	030	α 2	۸/×		1500 Ohms 100E-12 F	1 N/R	1 FAILED	2500 N/R	103	252	13

Part			ESD	Part					- - - -		
2000			66	~l	-				echnology	X	
011		751	-	Digital, I	Inverter, Buffer	,			TTL		
	Test	t Test Test Test	Test	Test	Test Nu	Number Date Number	Test	Test	Failure Te	Test Ger	General
	Sour	ce Date	Type	Source Date Type Resistance	Capacitance	Pulses Code Devices Result		Voltage Pin Combination		ķ	Remarks
	756	0786 SS	SS	1500 Ohms	100E-12 F	30 8606		2000 INPUT TO GND.			13
5772		N/R	7	Digital, Decoder	ecoder				TTL		
	030	N/R	X/8	N/R 1500 Ohms	100E-12 F	1 N/R	1 FAILED	2500 N/R	103	252	13
9772		۵ 2	^	reposed leticin	9000				Ē		
)		۲ <u>۲</u>	J	מיופון, מ	anone.				-		
	030	N/R	χ «	1500 Ohms	100E-12 F	1 N/R	1 FAILED	2500 N/R	103	252	13
272		FSC	8	Linear, Op	Linear, Operational Amplifier	fier			Bipolar		
	050	N/R	N/R	,500 Ohms	100E-12 F	1 N/R	1 FAILED	13675 N/R	102	188	13
747		X	~	Linear, Ope	Linear Operational Amplifier	fipr					
		:	i			5			B 001		
	030	N/R	α /	1500 Ohms	100E-12 F	1 N/R	1 FAILED	2500 N/R	103	252	13
į											
7474		FSC	-	Digital, Flip-Flop	lip-Flop				TT.		
	927	SS 9860	SS	1500 Ohms	100E-12 F	30 8626	3 FAILED	2000 INPUT TO GND.	19	504	13
ŕ		:									
(4/A		RAY	2	Linear, Op	2 Linear, Operational Amplifier	fier			Bipolar		
	392	0986 SS		1500 Ohms	100E-12 F	1 N/R	5 FAILED	2750 PINS 1,2 & 10,12 TO 4,9,13	19	145	13
7486		FSC	-	Digital, Gate	ate				11.		
	925	0886 SS	SS	1500 Ohms	100E-12 F	30 8619	3 FAILED	2000 IMPUT TO GND.	61	504	13

Part Number		Part ESD Mfr Class	SS	Part Description	_	,			Technology		ĺ
2490		EX I		Digital, Co	Counter/Divider				111		
	Source 029		Test Test Test Date Type Resi N/R N/R 1500	Test Resistance 1500 Ohms	Test <u>Capacitance</u> 100E-12 F	Number Date Number Test Pulses Code Devices Resu 1 N/R 1 FAIL	#1 G	Voltage Pin Combination 4987 N/R	Failure Test <u>Criteria Rema</u> 102	ks 88	General Remarks 13
74AC00		FSC	2 Dig	Digital, Ga	Gate				CMOS		
	727	0886 55		1500 Ohms	100E-12 F	40 N/R	3 FAILED 3 FAILED	4000 INPUT TO OUTPUT 3500 INPUT TO OUTPUT	100	275 275	13
	427	0886 55		1500 Ohms	100E-12 F	50 N/R	3 FAILED 3 FAILED	5000 INPUT TO GND. 5000 VCC TO GND.	100	275 275	13 13
	759	0886 SS		1500 Ohms	100E-12 F	40 N/R	3 FAILED 3 FAILED	3500 VCC TO OUTPUT 3500 OUTPUT TO GND.	100	275 275	13
74AC109		FSC	3 Dig	Digital, Fl	flip-Flop				CMOS		
	127	0886 s	ss 150	1500 Ohms	100E-12 F	50 N/R	3 FAILED	S000 INPUT TO GND.	100	275	13
	457	0587 s	ss 150	1500 Ohms	100E-12 F	50 N/R	3 FAILED	5000 OUTPUT TO GND.	100	275	13
	925	0587 s	ss 150	1500 Ohms	100E-12 F	50 N/R	3 FAILED	4850 INPUT TO VCC	100	275	13
	757	0587 SS		1500 Ohms	100E-12 F	50 N/R	3 FAILED 3 FAILED 3 FAILED	5000 OUTPUT TO VCC 4850 INPUT TO OUTPUT. 5000 VCC TO GND.	100	275 275 275	51 51
74AC153		FSC	2 Dig	Digital, M∟	Multiplexer				CMOS		
	225	1186 SS		1500 Ohms	100E-12 F	50 N/R	3 FAILED 3 FAILED	4250 INPUT TO GND. 4950 OUTPUT TO GND.	100	275 275	13
	427	1186 SS		1500 Ohms	100E-12 F	40 N/R	3 FAILED	3950 INPUT TO VCC	100	275	13

1	General Remarks 13 13	!	<u> </u>		£1 £1 £1 £1 £1	£1 £1 £1
	ks 275 275 275	į	275 275 275 275 275 275		275 275 275 275 275 275	275 275 275 275
Technology CMOS	Failure Test Criteria Remar 100 2 100 2	CWOS	100 100 100 100 100	CMOS	100 100 100 100 100 100	CMOS 100 100 100
	Voltage Pin Combination 5000 OUTPUT TO VCC 4450 INPUT TO OUTPUT 5000 VCC TO GND		4000 INPUT TO GND 4800 INPUT TO VCC 5000 OUTPUT TO CCC 5000 INPUT TO OUTPUT 5000 VCC TO GND.		3700 INPUT TO GND 4800 INPUT TO VCC 50.00 OUTPUT TO GND 5000 OUTPUT TO CCC 4800 INPUT TO OUTPUT 5000 VCC TO GND	4800 INPUT TO VCC 4875 INPUT TO GND 5000 OUTPUT TO VCC 5000 OUTPUT TO GND
	Test Result FAILED FAILED FAILED	; ;	5 FAILED 3 FAILED 5 FAILED 5 FAILED 5 FAILED 5 FAILED		3 FAILED 3 FAILED 3 FAILED 3 FAILED 5 FAILED	3 FAILED 3 FAILED 3 FAILED 3 FAILED
	Number Date Number Pulses Code Devices 50 N/R 3	:	40 N/R 50 N/R		40 N/R 50 N/R	50 N/R
Part <u>Description</u> Digital, Multiplexer	lest <u>Stance Capacitance</u> Ohms 100E-12 F	Counter/Di	1500 Ohms 100E-12 F	Digital, Counter/Divider	1500 Ohms 100E-12 F	Digital, Counter/Divider 1500 Ohms 100E-12 f
Part ESD Mfr Class FSC 2	Test ce <u>Date</u> 1186	2	0387 SS 0387 SS	FSC 2	0786 SS 0786 SS	FSC 3
(Contid)	Source 427	Ċ	427		427	757
Part Number (Co		74AC163		74AC169		74AC191

Part Number (Con	(Cont.d)	Part ESD Mfr Class	Part Description	c				Technology	<u>></u>	
L	, ,		Digital,	Counter/Divider	<u>.</u>			CMOS		
	Fest	Test Test Test	t Test		Number Date	Test				General
	Souri 427	ce Date I <u>yp</u> 0287 SS	Source Date Type Resistance	Capacitance 100E-12 F	Pulses Code 50 N/R	Devices Result v	Voltage Pin Combination 4825 INPUT TO OUTPUT	Lriteria Ke	Kemarks Ke 275	remarks 13
							5000 VCC TO GND	100	275	13
74AC245		FSC 3	Digital,	Transceiver				CMOS		
	427	1286 SS	1500 Ohms 100E-12	100E-12 F	50 N/R	3 FAILED	5000 1-0 TO GND	100	275	13
						3 FAILED	5000 1-0 TO VCC	100	275	13
						3 FAILED	5000 INPUT TO GND	100	275	13
							4600 INPUT TO VCC	100	275	13
							4800 VCC TO GND	100	275	13
							5000 VCC TO GND	100	275	13
						3 FAILED	5000 VCC TO GND	100	275	13
74AC251		FSC 2	Digital,	Multiplexer				CMOS		
	725	0586 SS	1500 Ohms	100E-12 F	40 N/R	3 FAILED	3800 INPUT TO OUTPUT	100	275	13
						3 FAILED	3500 INPUT TO GND	100	275	13
						3 FAILED	3500 INPUT TO VCC	100	275	Ε :
						3 FAILED	3500 OLIPUT TO GND	100	5/2	13
	427	0586 SS	1500 Ohms	100E-12 F	50 N/R	3 FAILED	4800 OUTPUT TO VCC	100	275	13
						3 FAILED	5000 VCC TO GND	100	275	13
74AC253		FSC 2	Digital,	Multiplexer				SOWO		
	427	SS 9860	1500 Ohms 100E-12	100E-12 F	50 N/R	3 FAILED	4750 INPUT TO GND	100	275	13
	727	SS 9860	1500 Ohms	100E-12 F	40 N/R	3 FAILED	4000 INPUT TO VCC	100	275	13
	727	0986 SS	1500 Ohms	100E-12 F	50 N/R	3 FAILED	5000 OUTPUT TO GND	100	275	13

Fart Number (Coatid) 7+AC253	(p)	Part ESD Mfr Class FSC 2	Part <u>Descripti</u> Digital,	on Multiplexer				Technology CMOS	<u> </u>	1
	Sot 427		Test Test Test Oate Type Resistance 0986 SS 1500 Ohms	Test <u>Capacitance</u> 100E-12 F	Number Date Number Test Pulses Code Devices Resul 50 N/R 3 FAILE 3 FAILE	+ ⊖ ⊖	Voltage Pin Combination 5000 INPUT TO OUTPUT 5000 VCC TO GND	Failure Test Criteria Remarks 100 275		General Remarks 13
74AC258		FSC 2	Digital,	Multiplexer				CMOS		
	457	1186 SS	1500 Ohms	100E-12 F	50 N/R	3 FAILED	5000 INPUT TO GND	100	275	13
	457	1186 SS	1500 ОҺтѕ	100E-12 F	40 N/R	3 FAILED	3650 INPUT TO VCC	100	275	13
	427	1186 SS	1500 Ohms	100E-12 F	50 N/R	3 FAILED 3 FAILED 3 FAILED 3 FAILED	5000 OUTPUT TO GND 5000 OUTPUT TO GND 4500 INPUT TO OUTPUT 5000 VCC TO GND	100	275 275 275 275	£ £ £ £
74AC299		FSC 3	Digital, Re	Register, Shift				CMOS		
	727	SS 9860	1500 Ohms	100E-12 F	50 N/R	3 FAILED 3 FAILED 3 FAILED 3 FAILED 3 FAILED	5000 INPUT TO GND 5000 INPUT TO VCC 4800 OUTPUT TO GND 5000 OUTPUT TO OUTPUT 5000 INPUT TO OUTPUT 4600 GND TO VCC	100 100 100 100 100	275 275 275 275 275 275 275	51 51 51 51 51 51 51 51
74AC323		FSC 3	Digital, Re	Register, Shift				SOWO		
	427	0986 SS	1500 Ohms	100E-12 F	50 N/R	3 FAILED 3 FAILED 3 FAILED 3 FAILED 3 FAILED	5000 INPUT TO GND 5000 INPUT TO VCC 4700 OUTPUT TO GND 5000 OUTPUT TO VCC 5000 INPUT TO OUTPUT	100 100 100 100 100	275 275 275 275 275	13 13 13 13

Part Number (Cont'd) 744C323	(p)	Part ESD Mfr Class FSC 3	Part <u>Description</u> Digital, Re	on Register, Shift				Technology CMOS	X	1
	Test	Test Test Test	Test Test	Test	Number Date Number	Test	Test Voltane Din Combination	Failure Te Criteria Re	Test Ger Remarks Ren	General Remarks
	27 dr. 27	27 0986 SS 1500 Ohms	1500 Ohms	100E - 12 F	N/R	FAILED				13
74AC521		FSC 1	Linear, Comparator	mparator				CMOS		
	427	1086 SS	1500 Ohms	100E-12 F	30 N/R	3 FAILED	1890 INPUT TO GND	100	275	13
	427	1086 SS	1500 Ohms	100E-12 F	40 N/R	3 FAILED	2850 INPUT TO VCC	100	275	13
	427	1086 SS	1500 Ohms	100E-12 F	50 N/R	3 FAILED	4950 OUTPUT TO GND	100	275	13
	757	1086 SS	1500 Ohms	100E-12 F	40 N/R	3 FAILED 3 FAILED 3 FAILED	3800 OUTPUT TO VCC 3100 INPUT TO OUTPUT 2150 VCC TO GND	100	275 275 275 275	£ £ £
74AC540		FSC 3	Digital, L	Line/Bus Driver				SOWO		
	427	0886 ss	1500 Ohms	100E-12 F	50 N/R	3 FAILED 3 FAILED 3 FAILED 3 FAILED 3 FAILED 3 FAILED	5000 INPUT TO GND 4900 INPUT TO VCC 5000 OUTPUT TO GND 5000 OUTPUT TO VCC 4600 INPUT TO OUTPUT 5000 VCC TO GND	100 100 100 100 100	275 275 275 275 275 275 275	£1 £1 £1 £1 £1
74AC541		FSC 3	Digital, L	Line/Bus Oriver				CMOS		
	427	1086 SS	1500 Ohms	100E-12 F	50 N/R	3 FAILED 3 FAILED 3 FAILED 3 FAILED	4999 INPUT TO GND 4550 INPUT TO VCC 4950 OUTPUT TO VCC 4999 OUTPUT TO VCC 4950 INPUT TP OUTPUT	100 100 100 100	275 275 275 275 275 275	13 13 13 13

Part Number (Cont'a)	(1,4)	Part ESD Mfr Class	Part Descripti	on				Technology	>	
74ACS41		FSC 3	Digital,	Line/Bus Driver				CMOS		
	Test Source 427	Source Date Type Resistance	t Test E Resistance 1500 Ohms	Test <u>Capacitance</u> 100E-12 F	Number Date Number Pulses Code Devices 50 N/R 3	Test Result FAILED	Voltage Pin Combination 4999 OUTPUT TO VCC	Failure Test <u>Criteria Remarks</u> 100 275		General <u>Remarks</u> 13
74AC646		FSC 2	Digital,	Trarsceiver				CMOS		
	427	0886 SS	1500 Ohms	100E-12 F	50 N/R	3 FAILED	5000 INPUT TO GND	100	275	13
	225	0886 55	1500 Ohms	100E-12 F	40 N/R	3 FAILED	4000 INPUT TO VCC	100	275	13
	127	0886 SS	1500 Ohms	100E-12 F	50 N/R	3 FAILED 3 FAILED	5000 1-0 TO GND 5000 1-0 TO VCC	100	275 275	£1 £1
	225	0886 SS	1500 Ohms	100E-12 F	40 N/R	3 FAILED	3750 1 10 1-0	100	275	13
	225	0886 SS	1500 Ohms	100E-12 F	50 N/R	3 FAILED	5000 VCC TO GND	100	275	13
74AC708		FSC 3	Digital, Me	Іетогу				SOWO		
	427	0687 SS	1500 Ohms	100E-12 F	50 N/R	3 FAILED 3 FAILED 3 FAILED 5 FAILED 5 FAILED 7 FAILED 7 FAILED	5000 INPUT TO GND 5000 OUTPUT TO GND 4950 INPUT TO VCC 5000 INPUT TO OUTPUT 5000 VCC TO GND	100 100 100 100 100	275 275 275 275 275 275 275	5 5 5 5 5 5
74AC74		FSC 3	Digital, Flip-Flop	ip-Flop				CMOS		
	925	0886 SS	1500 Ohms	100E-12 F	50 N/R	3 FAILED	4950 INPUT TO OUTPUT 5000 INPUT TO GND.	100	275 275	13
	727	0886 SS	1500 Ohms	100E-12 F	50 N/R	3 FAILED	5000 OUTPUT TO GND.	100	275	13

	General Remarks 13 13	13		13	13	13	13		5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5		13
72	rks 275 275 275	275		275 275	275 275	275	275		275 275 275 275 275 275 275		275
Technology CMOS	Failure Test Criteria Rema 100 100 100	100	CMOS	100	100	100	100	SOWO	100 100 100 100 100	SOWO	100
	Voltage Pin Combination 5000 OUTPUT TO VCC 5000 OUTPUT TO GND. 5000 VCC TO GNO.	S000 INPUT TO OUTPUT		2600 INPUT TO GND 3100 OUTPUT TO GND	4250 INPUT TO VCC 4950 OUTPUT TO VCC	2700 INPUT TO OUTPUT	5000 VCC TO GND		4500 INPUT TO GND 4250 INPUT TO VCC 5000 OUTPUT TO VCC 4500 INPUT TO VCC 4500 INPUT TO OUTPUT 5000 VCC TO GND		5000 INPUT TO GND
	Test Result FAILED FAILED	3 FAILED		3 FAILED 3 FAILED	3 FAILED 3 FAILED	3 FAILED	3 FAILED		3 FAILED 3 FAILED 3 FAILED 3 FAILED 3 FAILED		3 FAILED
	Number Date Pulses Code 50 N/R	50 N/R		40 N/R	50 N/R	40 N/R	50 N/R		50 N/R		50 N/R
on Flip-Flop	Test <u>Capacitance</u> 100E-12 F	100E-12 F	Gate	100E-12 F	100E-12 F	100E-12 F	100E-12 F	Gate	100E - 12 F	flip-flop	100E-12 F
Part <u>Description</u> Digital, Fl	Test <u>Resistance</u> 1500 Ohms	1500 Ohms	Digital, G	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	Digital, G	1500 Ohms 100E-12	Digital, F	1500 Ohms
Part ESD Mfr Class FSC 3	Test Test Test Test Source Date Type Resistance 426 0886 SS 1500 Ohms	0886 SS	FSC 2	0187 SS	0187 SS	0187 SS	0187 SS	FSC 3)986 SS	FSC 3	38 2870
(Contid)	Source	227	_	727	427	727	427		7.57		427
Part Number (C 74AC74			74ACT00					74ACT08		74ACT109	

	General Remarks 13 13 13		13 13 13 13 13		£ £ £ £ £		13	13	13
ХБо			275 275 275 275 275 275		275 275 275 275 275 275 275		275	275	275
Technology	Failure Test Criteria Remarks 100 275 100 275 100 275 100 275 100 275 100 275 100 275 100 275 100 275 100 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275 275	SOWO	100 100 100 100	SOWO	100 100 100 100 100	CMOS	100	100	100
	Voltage Pin Combination 4950 INPUT TO VCC 5000 ONT UT TO GND 5000 OUTPUT TO VCC 4950 INPUT TO OUTPUT 4950 VCC TO GND		5000 INPUT TO GND 5000 INPUT TO VCC 5000 OUTPUT TO VCC 5000 INPUT TO OUTPUT 4900 VCC TO GND		4150 INPUT TO VCC 4950 INPUT TO GND 5000 OUTPUT TO GND 5000 OUTPUT TO VCC 4900 INPUT TO OUTPUT 5000 VCC TO GND		4550 :4PUT TO GND	3400 INPUT TO VCC	5000 OUTPUT TO GND
	Number Test Devices Result 3 FALED 3 FALED 3 FALED 3 FALED 3 FALED		A FAILED 3 FAILED 3 FAILED 3 FAILED 3 FAILED 3 FAILED		3 FAILED 3 FAILED 3 FAILED 3 FAILED 3 FAILED		3 FAILED	3 FAILED	3 FAILED
	Number Date Pulses Code 50 N/R		50 N/R		50 N/R		50 N/R	40 N/R	50 N/R
Part <u>Description</u> Digital, Flip-Flop	Test <u>Capacitance</u> Ohms 100E-12 F	Digital, Multiplexer	1500 Ohms 100E-12 F	Digital, Multiplexer	1500 Ohms 100E-12 F	Digital, Multiplexer	1500 Ohms 100E-12 F	1500 Ohms 100E-12 F	1500 Ohms 100E-12 F
Part ESD Mfr Class FSC 3	Test Test Test Test Source Date Type Resist 427 0487 SS 1500	FSC 3 D	757 0487 SS 1	FSC 3 D	427 1186 SS 17	FSC 2 D	427 1086 SS 1!	427 1086 SS 15	427 1086 \$\$ 1!
Part Number (Cont'd) 74ACT109		74ACT 151		74ACT153		74ACT157			

Part				Part							
Number (Contid)		Mtr FSC	2 0	Description Digital, Mu	ion Multiplexer				CMOS	×	1
	Test		Test Test Test	lest	Test	Number Date Number Test		Test	failure Te	fest Ge	General
	Sourc	se Date	Type	Source Date Type Resistance	Capacitance	Pulses Code Devices	Result	Voltage Pin Combination	Criteria Re	Remarks Re	Remarks
	427	1086 SS	SS	1500 Ohms	100E-12 F	50 N/R	3 FAILED	5000 OUTPUT TO VCC	100	275	13
							3 FAILED	4450 INPUT TO OUTPUT	100	275	13
							3 FAILED	4800 VCC TO GND	100	275	13
		6			-				υ Σ		
74ACT158		FSC	7	Digital, M	Multiplexer				S		
	427	SS 9860		1500 Ohms	100E-12 F	50 N/R	3 FAILED	4450 INPUT TO GND	00 ا	275	13
	427	0986 SS		1500 Ohms	100E-12 F	40 N/R	3 FAILED	3800 INPUT TO VCC	100	275	13
	427	SS 9860		1500 Ohms	100E-12 F	50 N/R	3 FAILED	5000 OUTPUT TO GND	100	275	13
							3 FAILED	5000 OUTPUT TO VCC	100	275	13
							3 FAILED	5000 INPUT TO OUTPUT	100	275	13
							3 FAILED	4950 VCC TO GND	100	275	13
, P		(-	- C				SUMU		
/4AC1 1/3		7.57		חופונמו, ד					;		
	427	0587 SS		1500 Ohms	100E-12 F	50 N/R	3 FAILED	4900 INPUT TO VCC	100	275	13
							3 FAILED	5000 INPUT TO GND	100	275	13
								50000 OUTPUT TO VCC	100	275	13
							3 FAILED	5000 OUTPUT TO GND	100	275	13
							3 FAILED	5000 INPUT TO OUTPUT	100	275	13
							3 FAILED	5000 VCC TO GND	100	275	13
74401745		F.S.C.	~	Digital. T	Transceiver				CMOS		
		}									
	727	1286 SS		1500 Ohms	100E-12 F	50 N/R	3 FAILED	5000 INPUT TO GND	100	275 275	13
								4330 INPUT TO VCC	00.	27.0	<u> </u>
							S FAILED	5000 1.0 10 vcc	100	275	ς Σ

Technology	4900 INPUT TO GND 100 275 13 4400 INPUT TO VCC 100 275 13 5000 OUTPUT TO GND 100 275 13 5000 OUTPUT TO VCC 100 275 13 5000 INPUT TO OUTPUT 100 275 13 4900 VCC TO GND 100 275 13	SOWO	5000 INPUT TO GND 100 275 13 4550 INP (UT TO VCC) 100 275 13 5000 OUTPUT TO GND 100 275 13 4900 INPUT TO OUTPUT 100 275 13 5000 VCC TO GND 100 275 13	CMOS	4950 INPUT TO GND 100 275 13 4200 INPUT TO VCC 100 275 13 5000 OUTPUT TO GND 100 275 13 5000 OUTPUT TO GND 100 275 13 5000 VCC TO GND 100 275 13	CMOS	3500 X14 TO GND 13
Number Date Number Test Te Pulses Code Devices Result Vo 50 N/R 3 FAILED	50 N/R 3 FAILED 3 FAILED 3 FAILED 3 FAILED 3 FAILED		50 N/R 3 FAILED 3 FAILED 5 FAILED 5 FAILED 5 FAILED 5 FAILED 7 FAILED		50 N/R 3 FAILED 3 FAILED 3 FAILED 3 FAILED 3 FAILED 3 FAILED		40 N/R 3 FAILED
FSC 3 Digital, Transceiver FSC 3 Digital, Transceiver Fest Test Test Test Fest Source Capacitance Capacitance (AZZ 1286 SS 1500 Ohms 100E-12 F	FSC 3 Digital, Multiplexer +27 3286 SS 1500 Ohms 100E-12 F	FSC 3 Digital, Multiplexer	-27 0986 SS 1500 Ohms 100E-12 F	FSC 3 Digital, Multiplexer	427 1136 SS 1500 Ohms 100E-12 F	FSC 2 Digital	427 0886 SS 1500 Ohms 100E-12 F
	7.4CT255	7~ACT257		74AC1258		74ACT510	

	General	Kemarks 13	13	13	13	13	13	13		13	13	13	13	13	13		13	5 ;	<u>.</u>	2 !	ž		13
37	-	275	275	275	275	275	275	275		275	275	275	275	275	275		275	275	2/2		275 275		275
Technology		100	100	100	100	100	100	100	SOWO	100	100	100	100	100	100	SOWO	100	100	100	001	100 100	CMOS	100
	Test	3500 X14 TO VCC	ACC	3500 ACC TO VCC	3500 P11 TO GND	3500 P11 TO VCC	3500 P34 TO GND	3500 P34 T0 VCC		5000 INPUT TO VCC	4500 INPUT TO GND	4200 OUTPUT TO VCC	4000 OUTPUT TO GND	5000 INPUT TO OUTPUT	4700 VCC TO GND		5000 INPUT TO GND	5000 OUTPUT TO GND	4950 INPUL TO VCC	Suga control to vec	4850 INPUT TO OUTPUT 5000 VCC TO GND		4900 INPUT TO GND
	Test	Devices Result Vo		3 FAILED		3 FAILED	3 FAILED	3 FAILED	3 FAILED	3 FAILED	3 FAILED			3 FAILED	5 FAILED		3 FAILED 3 FAILED		3 FAILED				
	Jate	Pulses Code								50 N/R			40 N/R	50 N/R		ڍ	50 N/R						50 N/R
	Test	Capacitance 100E-12 F							flip-flop, D	100E-12 F			100E-12 F	100E-12 F		Line/Bus Driver	100E-12 F					Latch	100E-12 F
Part <u>Description</u> Digital	Test	Source Date Type Resistance 427 0886 SS 1500 Ohms							Digital, Fl	1500 Ohms 100E-12			1500 Ohms	1500 Ohms		Digital, Li	1500 Ohms 100E-12					Digital,	1500 Ohms
Part ESD Mfr Class FSC 2	Test Test Test	0886 SS							FSC 2	0687 SS			0687 SS	SS 7890		FSC 3	0687 SS					FSC 3	1186 SS
(Cont.d)	Test	Source 427							_	727			427	427		_	727					_	725
Part Number (Co 74ACT510									74ACT534							74ACT540						74ACT563	

		larks Remarks 275 13		275 13	275 13			275 13			275 13	275 13					275 13			275 13					275 t3 275 t3
Technology	failure Test	Criteria Remarks 100 275	100	100	100	100	CMOS	100	100	100	100	100	100		CMOS	100	100	100	100	100	100	CMOS	100	100	100 100
		Voltage Pin Combination 5000 OUTPUT TO GND	4850 INPUT TO VCC	5000 OUTPUT TO VCC	4550 INPUT TO OUTPUT	5000 VCC TO GND		4950 INPUT TO VCC	4300 INPUT TO GND	5000 OUTPUT TO VCC	5000 OUTPUT TO GND	4450 INPUT TO OUTPUT	5000 VCC TO GND			5000 INPUT TO GND	4873 INPUT TO VCC	5000 OUTPUT TO GND	5000 OUTPUT TO VCC	4750 INPUT TO OUTPUT	5000 VCC TO GND		5000 INPUT TO GND	5000 INPUT TO VCC	5000 OUTPUT TO GND 5000 OUTPUT TO VCC
	Number Test	Result FAILED	3 FAILED	3 FAILED	3 FAILED	3 FAILED		SO N/R 3 FAILED	3 FAILED	3 FAILED	3 FAILED	FAILED	3 FAILED				FAILED			3 FAILED	FAILED			3 FAILED	3 FAILED 3 FAILED
٤		Lapacitance Pulses 100E-12 F 50					flip-Flop	100E-12 F 50								100E-12 F 50 N/R						_	100E-12 F 50 N/R		
Part <u>S Description</u> 3 Digital, Latch							3 Digital, Flip	1500 Ohms 10(Digital, Latch	1500 Ohms 10(3 Digital, Latch	1500 Ohms		
Part ESD Mfr Clas FSC	Test Test Test Test	427 1186 SS 1500 Ohms					FSC 3	427 1186 SS							FSC 3	427 0986 SS						FSC 3	427 1086 SS		
Part Number (Cont'd) 74ACT563							74AC1564							:	74AC1573							74ACT574			

	General Remarks 13		13	13	13	13		£ £ £ £ £ £		13	13		13
>	<u>rks</u> 275 275		275 275	275	275	275 275		275 275 275 275 275 275 275	STTL	252	507	STTL	204
Tech pology CMOS	Failure Test Criteria Rema 100 100	CMOS	000	100	100	100	CMOS	100 100 100 100 110	Advanced STTL	51	61	Advanced STTL	61
	Voltage Pin Combination 5000 INPUT TO OUTPUT 5000 VCC TO GND		4950 INPUT TO GND 4950 INPUT TO VCC	5000 OUTPUT TO VCC	4950 OUTPUT TO GND	5000 INPUT TO OUTPUT 5000 VCC TO GND		5000 INPUT TO GND 5000 OUTPUT TO GND 4950 INPUT TO VCC 5000 OUTPUT TO OUTPUT 5000 VCC TO GND		500 INPUT(+) INPUT(-)	1000 INPUT TO GND.		1000 INPUT TO GND.
	Test Result FAILED FAILED		3 FAILED 3 FAILED	3 FAILED	3 FAILED	3 FAILED 3 FAILED		3 FAILED 3 FAILED 5 FAILED 5 FAILED 5 FAILED 7 FAILED		3 FAILED	3 FAILED		3 FAILED
	Number Date Pulses Code 50 N/R		50 N/R	50 N/R	50 N/R	50 N/R		50 N/R		1 N/R	20 N/R		20 8624
ion Latch	Test Test Resistance Capacitance 1500 Ohms 100E-12 F	Метогу	100E-12 F	100E-12 F	100E-12 F	100E-12 F	Flip-Flop	100E-12 F	Gate	100E-12 F	100E-12 F	Gate	ms 100E-12 F
Part <u>Description</u> Digital, La	Test Test <u>Type</u> Re <u>sistance</u> SS 1500 Ohms	Digital, N	1500 Ohms 100E-12	1500 Ohms	1500 Ohms	1500 Ohms	Digital, F	1500 Ohms 100E-12	Digital, (1500 Ohms	1500 Ohms	Digital, (1500 Ohms
Part ESD Mfr Class FSC 3	Test Test Test Source Date Type 427 1086 SS	FSC 3	0387 SS	1087 SS	1086 SS	0387 SS	FSC 3	0487 SS	FSC 1	0681 GN	0986 SS	FSC 1	0786 SS
(Cont'd)	Test Sourc 427		227	427	727	727		727		670	426		927
Part Number (C 74ACT574		74ACT 708					74AC174		74500			74£02	

	וזו	t General	Remarks Remarks	252 13	252 13	252 13	252 13	252 13	252 13	252 13	252 13	252 13	252 13	252 13	252 13	252 13	252 13	252 13		252 13	252 13	252 13	252 13	252 13	252 13	252 13				252 13	252 13	252 13	252 13	252 13	252 13
Technology	Advanced STTL	Failure Test		51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	Ε.	51	51	51	7	7	7	7	7	7	7	7	7	7	7	7	4
		st	Pin Combinat	1250 INPUT(1)(+) COM.(7)(-)	1250 INPUT(3)(+) COM.(7)(-)	1250 INPUT(3)(+) COM.(7)(-)	1250 INPUT(5)(+) COM.(7)(-)	1250 INPUT(9)(+) COM.(7)(-)	1250 INPUT(11)(+) COM(7)(-)	1250 INPUT(13)(+) COM(7)(-)	1250 COM(7)(+) OUI.(4)(-)	1250 COM(7)(+) OUI.(6)(-)	1250 COM(7)(+) OUI.(8)(-)	1250 COM(7)(+) OUT.(10)(-)	1250 COM(7)(+) OUT.(12)(-)	1250 INPUT(1)(+) OUT.(2)(-)	1250 INPUT(3)(+) OUT.(4)(-)	1250 INPUT(5)(+) OUT.(6)(-)	1250 INPUT(9)(+) OUT.(8)(-)	1250 IN.(11)(+) OUT.(10)(-)	1250 IN.(13)(+) OUT.(12)(-)	1250 VCC(-) COM.(7)(+)	1250 INPUT(1)(+) COM.(7)(-)	1250 INPUT(3)(+) COM.(7)(-)	1250 INPUT(5)(+) COM.(7)(-)	1250 INPUT(9)(+) COM.(7)(-)	1250 IN.(11)(+) COM.(7)(-)	1250 IN.(13)(+) COM.(7)(-)	1250 COM.(7)(+) OUT.(2)(-)	1250 COM.(7)(+) OUT.(4)(-)	1250 COM.(7)(+) OUT.(6)(-)	1250 COM.(7)(-) OUT.(8)(-)	1250 COM.(7)(+) OUT.(10)(-)	1250 COM.(7)(+) OUT.(12)(-)	1250 IN.(1)(+) OUT.(2)(-)
	ال.	Number Date Number Test Test	e Devices Result	1 N/R 2 FAILED	1 FAILED	1 PASSED	2 FAILED	2 FAILED	2 FAILED	2 FAILED	1 PASSED	1 PASSED	1 PASSED	1 PASSED	1 PASSED	2 FAILED	2 FAILED	2 FAILED	1 PASSED	2 FAILED	2 FAILED	1 PASSED	1 N/R 2 FAILED	2 FAILED	2 FAILED	2 FAILED	2 FAILED	2 FAILED	1 PASSED	1 PASSED	2 FAILED				
Part Description	Digital, Inverter, Buffer	Test Test Test	Capacitance	1500 Ohms 100E-12 F																			1500 Ohms 100E-12 F												
Part ESD Mfr Class		Test Test Test	Source Date Type Resistance	170 0881 GN																			171 N/R GN												
Part <u>Numb</u> er	74F04																																		

1		General	Remarks 13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	51
>	STTL		Remarks Re	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252
Technology	Advanced STIL		Criteria Re	. 7	4	7	7	4	7	7	7	7	7	7	7	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51
			Voltage Pin Combination 1250 IN (3)(+) OUIT (6)(-)	1250 IN.(5)(+) OUI.(6)(-)	1250 IN.(9)(+) OUT.(8)(-)	1250 IN.(11)(+) OUT.(10)(-)	1250 IN.(13)(+) OUT.(12)(-)	1250 COM.(7)(+) VCC(-)	1250 COM.(7)(+) OUI.(2)(-)	5000 COM.(7)(+) OUT.(4)(-)	5000 COM.(7)(+) OUT.(6)(-)	5000 COM.(7)(+) OUT.(8)(-)	5000 COM.(7)(+) OUT.(10)(-)	1250 COM.(7)(+) OUT.(12)(-)	5000 COM.(7)(+) VCC(-)	1250 IN.(1)(+) COM.(7)(-)		IN.(5)(+)	1250 IN.(9)(+) COM.(7)(-)	1250 IN.(11)(+) COM.(7)(-)	1250 IN.(13)(+) COM.(7)(-)	COM.(7)(+)	COM.(7)(+)	COM.(7)(+)		1250 COM.(7)(+) OUT.(10)(-)			1250 IN.(3)(+) OUT.(4)(-)	1250 IN.(5)(+) OUT.(6)(-)	1250 IN.(9)(+) OUT.(8)(-)		1250 IN.(13)(+) OUT.(12)(-)
		Test	Devices Result Vo			2 FAILED	2 FAILED	1 PASSED	2 FAILED	1 PASSED	1 PASSED	1 PASSED	1 PASSED	2 FAILED	1 PASSED	2 FAILED	2 FAILED		2 FAILED	2 FAILED	2 FAILED	2 PASSED			2 PASSED	2 PASSED	2 PASSED	2 FAILED	2 FAILED	2 FAILED	2 FAILED		2 FAILED
	Buffer	Number Date	Pulses Code	-					1 N/R							1 N/R																	
	Inverter, Buf		Capacitance						100E-12 F							100E-12 F																	
Part Description	Digital, Ir	Test Test	Source Date Type Resistance						1500 Ohms							1500 Ohms																	
Part ESD Mfr Class	-	Test Test	Date Type	; :					SN SN							№																	
1	FSC	rest Te	Source Da						172 N/R							173 N/R																	
(Cont'd)		ř	ÿΙ ,	Ē												-																	
Part	74F04																																

		General	Remarks	13	13	13	13	13	5	13	13	13	13	13	13	13	13	13	13	13	13	13	13	5	13	13	13	27	27	27
76	STTL		Remarks R	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252
Technology	Advanced SITL	Failure T	Criteria R	51	51	51	51	51	51	51	51	51	51	51	51	51	15	51	51	51	51	51	51	51	51	51	51	7	4	7
		Test	Voltage Pin Combination	1250 COM.(7)(+) VCC(-)	5000 COM.(7)(+) OUT.(2)(-)	5000 COM.(7)(+) OUT.(4)(-)	5000 COM.(7)(+) OUT.(6)(-)	5000 COM.(7)(+) OUT.(8)(-)	5000 COM.(7)(+) OUT.(10)(-)	5000 COM.(7)(+) OUT.(12)(-)	5000 COM.(7)(+) VCC(-)	1000 IN.(1)(+) COM.(7)(-)	1000 IN.(1)(+) COM.(7)(-)	1000 IN.(1)(+) COM.(7)(-)	400 IN.(1)(+) APTT(-)	300 IN.(3)(+) APTT(-)	400 IN.(5)(+) APTT(-)	300 IN.(9)(+) APTT(-)	100 IN.(11)(+) APTT(-)	400 IN.(13)(+) APTT(-)	1250 OUT.(2)(+) APTT(-)	1250 OUT.(4)(+) APTT(-)	1250 OUT.(6)(+) APTT(-)	1250 OUT.(8)(+) APTT(-)	1250 OUT.(10)(+) APTT(-)	1250 OUT.(12)(+) APTT(-)	1250 VCC(14)(+) APIT(-)	200 IN.(1)(+) APTT(-)	200 IN.(3)(+) APTT(-)	200 IN.(5)(+) APTT(-)
		Test	Code Devices Result 1	2 PASSED	2 PASSED	2 PASSED	2 PASSED	2 PASSED	2 PASSED	2 PASSED	2 PASSED	2 FAILED	2 FAILED	2 FAILED	1 FAILED	1 FAILED	1 FAILED	1 FAILED	1 FAILED	1 FAILED	1 PASSED	1 PASSED	1 PASSED	1 FAILED	1 FAILED	1 FAILED				
	fer	Number Date Number	Pulses	1 N/R	1 N/R							1 N/R	1 N/R	1 N/R	1 N/R													1 N/R		
C	Inverter, Buffer	Test	Capaci tance	100E-12 F	100E-12 F							100E-12 F	100E-12 F	100E-12 F	100E-12 F													100E-12 F		
Part <u>Description</u>	Digital, I	Test Test	Source Date Type Resistance	1500 Ohms	1500 Ohms							1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms													1500 Ohms		
ESD	-	Test	ZYPe	3	8							Š	8	8	SS													SS		
Part ES	FSC	Test	Date	N/R	N/R							0881 GN	N/R	N/R	0981 SS													N/R SS		
Po (Cont'd) M		Test	Source	173	174							175	176	177	178													179		
Part Number	74.504																													

1		General	Remarks	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	0	0	0	0	0	0	0	0	0
>	STTL			252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	292	292	292	292	292	292	292	292	262
Technology	Advanced STIL	Failure Test	Criteria Re	7	7	7	7	7	7	7	7	7	7	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51
		Test	Voltage Pin Combination	400 IN.(9)(+) APTT(-)	600 IN.(11)(+) APTT(-)	500 IN.(13)(+) APTT(-)	5000 OUT.(2)(+) APTT(-)	5000 OUT.(4)(+) APIT(-)	5000 OUT.(6)(+) APTT(-)	5000 OUT.(8)(+) APTT(-)	5000 OUT.(10)(+) APTI(-)	5000 OUT.(12)(+) APTT(-)	5000 VCC(14)(+) APTT(-)	400 IN.(1)(+) APTT(-)	400 IN.(3)(+) APTT(-)	400 IN.(5)(+) APTT(-)	300 IN.(9)(+) APIT(-)	400 IN.(11)(+) APTT(-)	400 IN.(13)(+) APTT(-)	5000 OUT.(2)(+) APTT(-)	5000 OUT.(6)(+) APTT(-)	5000 OUT.(8)(+) APTT(-)	5000 OUT.(10)(+) APTT(-)	5000 OUT.(12)(+) APTT(-)	5000 VCC(14)(+) APTT(-)	1250 IN.(1)(+)	1250 IN.(3)(+)	800 IN.(5)(+)	1250 IN.(9)(+)	1250 IN.(11)(+)	1250 IN.(13)(+)	1250 OUT.(2)(+)	1250 OUT.(4)(+)	1250 OUT.(6)(+)
		Date Number Test Te		1 FAILED	1 FAILED	1 FAILED	1 PASSED	1 PASSED	1 PASSED	1 FAILED	1 FAILED	2 PASSED	1 PASSED	1 PASSED	1 PASSED	1 PASSED	1 PASSED	1 PASSED	1 PASSED	1 FAILED	1 PASSED	1 PASSED	1 FAILED	1 PASSED	1 PASSED	1 PASSED								
	er	Number Date	Pulses Code	1 N/R										1 N/R												1 N/R								
	Inverter, Buffer	Test	Capaci tance	100E-12 F					•					100E-12 F												100E-12 F								
Part <u>Description</u>		Test Test	Source Date Type Resistance	1500 Ohms										1500 Ohms												1500 Ohms								
Part ESD Mfr Class	FSC 1	Test Test	Date Type	N/R SS										N/R SS												0981 SS								
(Cont'd)	L	Test	Source	179										180												181								
Part Number (C	74504																																	

	}	General	Remarks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	c		> C	o	0	0	0	0	0	0	0	0	0	13
λb	STTL	Test	Remarks		292	262	262	262	262	262	292	292	292	292	292	292	292	292	292	292	676	707	202	262	262	292	262	292	262	292	292	262	292	252
Technology	Advanced STTL	Failure I	Criteria R		51	51	51	4	7	4	7	4	7	7	7	7	4	7	7	4	5	5 5	. r.	51	51	51	51	51	51	51	51	51	51	51
		Test	Voltage Pin Combination	1250 OUT.(8)(+)	1250 OUT.(10)(+)	1250 OUT.(12)(+)	1250 VCC(14)(+)	1800 IN.(1)(+)	800 IN.(3)(+)	700 IN.(5)(+)	1800 IN.(9)(+)	1400 IN.(11)(+)	1400 IN.(13)(+)	5000 OUT.(2)(+)	5000 OUT.(4)(+)	5300 OUT.(6)(+)	5000 OUT.(8)(+)	5000 OUT.(10)(+)	5000 OUT.(12)(+)	5000 VCC(14)(+)	3000 IN (1)(+)	2200 IN (376+)			900 IN.(11)(+)	900 IN.(13)(+)	5000 OUT.(2)(+)	5000 OUT.(4)(+)	5000 OUT.(6)(+)	5000 OUT.(8)(+)	5000 OUT.(10)(+)	5000 OUT.(12)(+)	5000 VCC(14)(+)	60 IN.(11)(+) APII(-)
		Number Test T	Devices Result V	1 PASSED	1 PASSED	1 PASSED	1 PASSED	1 FAILED	1 FAILED	1 FAILED	1 FAILED	1 FAILED	1 FAILED	1 FAILED	1 FAILED	1 PASSED	1 PASSED	1 PASSED	1 PASSED	1 PASSED	LANTER	1 541 50	1 FA11 FD	1 FAILED	1 FAILED	1 FAILED	1 PASSED	1 PASSED	1 PASSED	1 FAILED				
	fer	Number Date	Pulses Code	1 N/R				1 N/R													0/N L	-												10 N/R
'n	Inverter, Buffer	Test	e Capacitance	100E-12 F				100E-12 F													100F-12 F													100E-12 F
Description	Digital,	Test	Resistance	1500 Ohms				1500 Ohms													1500 Obms													1500 Ohms
Mfr Class	-	Test Test Test	Source Date Type Resistance	0981 SS				N/R SS													8/ N)												0981 SS
(Cont'd) M	u.	Test	Source	181				182													183	}												184

1	General Remarks	13	13	13	13	13	13	13	13	13	0	0	0	0	0	0	0	15
STIL	fest Ge Remarks Re		252	252	252	252	252	252	252	252 252	292	292	292	292	292	292	262	292
Technology Advanced STIL	faiture To		51	7	7	7	7	7	51	51	51	51	51	51	51	51	51	7
	Pest Valtada Din Combination		60 IN.(11)(+) APIT(-)	60 IN.(1)(+) APTT(-)	120 IN.(1)(+) APTT(-)	120 IN.(1)(+) APTT(-)	160 IN.(1)(+) APIT(-)	160 IN.(1)(+) APTT(-)	240 IN.(9)(+) APTT(-)	240 IN.(9)(+) APIT(-) 240 IN.(9)(+) APIT(-)	480 IN.(5)(+)	480 IN.(5)(+)	640 IN.(5)(+)	240 IN.(5)(+)	480 IN.(5)(+)	640 IN.(5)(+)	640 IN.(5)(+)	560 IN.(5)(+)
	lest Result	N/R 3 FALLED	1 PASSED	S FAILED	7 FAILED	1 FAILED	1 PASSED	4 FAILED	1 FAILED	1 FAILED 3 PASSED	2 FAILED	1 PASSED	1 PASSED	1 PASSED	1 PASSED	3 PASSED	1 PASSED	4 PASSED
7			100 N/R	30 N/R	10 N/R	100 N/R	300 N/R	10 N/R	30 N/R	300 N/R	300 N/R	30 N/R	300 N/R	300 N/R	100 W/R	10 N/R	30 N/R	300 N/R
	Toga A Same Track	1908 - 12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	190E - 12 F	100E-12 F	100E-12 F	100E-12 F
		NEED 008, 188, 180, 180, 180, 180, 180, 180,	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1530 Ohms	1500 Ohms	1500 Ohms	1500 Ohms
			38186	N/R GN	N/R GN	N/R GN	N/R SS	N/R GN	N/R SS	N/R SS	0981 SS	0981 SS	0981 SS	0981 GN	NO 1366	0981 GN	0981 GN	N/R SS
•		gi,	g.	185	186	186	187	188	189	189	190	961	191	192	53	19.	194	195

	\$ 1 \$			Taxenter, Butter	10			Technology Advanced STTL	29Y	1
	Test	t Test Tes	Test Test		Date	Test	Test	Failure I		Generat
	196	ce Date N/R	Nesistance 1500 Ohms	Capacitance 100E-12 F	Putses Code Dev 10 N/R	Devices Result V	Voltage Pin Combination 420 IN.(5)(+)	Criteria R	Remarks Re 262	Remarks 0
	197	N/R GN	150C Ohms	100E-12 F	30 N/R	1 FAILED	560 IN.(5)(+)	4	292	0
	170	0381 GN	1500 Ohm;	100E-12 F	1 N/R	1 PASSED	1250 COM(7)(+) OUT.(2)(-)	51	252	13
	756	0612 \$\$	1500 Ohms	100E-12 F	20 N/R	3 FAILED	1000 INPUT TO GND.	61	504	13
74504		N/R 3	Digital,	Inverter, Buffer	L			Advanced SITL	STTL	
	180	N/R SS	1500 Ohms	100E-12 F	1 N/R	1 PASSED	5000 OUI.(4)(+) APTI(-)	51	252	27
74F08		FSC 1	Digital, G	Gate				Advanced STIL	STTL	
	÷26	1286 SS	1500 Ohms	100E-12 F	10 8624	3 FAILED	600 INPUT TO GND.	61	504	13
74F10		FSC 1	Digital,	Gate				Advanced SIIL	STTL	
	759	0786 SS	1500 Ohms	100E-12 F	20 8622	3 FAILED	1000 INPUT TO GND.	61	504	13
74F109		FSC 1	Digital,	flip-Flop				Advanced STTL	STTL	
	759	SS 9860	1500 Ohms	100E-12 F	10 8632	3 FAILED	600 INPUT TO GND.	61	504	13
74611		FSC 1	Digital, Ga	Gate				Advanced STTL	STTL	
	759	0786 SS	1500 Ohms	100E-12 F	10 8622	3 FAILED	600 INPUT TO GND.	61	504	13
74F112		FSC 1	Digital, Fl	Flip-flop				Advanced STTL	STTL	
	927	0686 SS	1500 Ohms	100E-12 F	30 8617	3 FAILED	2000 INPUT TO GND.	61	507	13

Part Number 74F113	Part ESD Mfr Clas	%l - -	Part Oescription Digital, Fli	on Flip-Flop					Technology Advanced STTL	ogy I STTL	
!	Toot foot foot	100	•		Nimber Date Nimber Tect		Tect		Failure Test		General
	Source Date	Type	Resistance	Capacitance	Pulses Code Dev	4	Voltage Pin Combination	,	Criteria R	ķ	Remarks
	426 0986 SS 1500 Ohms	SS	1500 Ohms	100E-12 F	20 8635	3 FAILED	1000 INPUT TO GND		61	204	13
74F138	FSC	-	Digital, D	Decoder					Advanced STTL	STTL	
	426 0686 SS		1500 Ohms	100E-12 F	20 8614	3 FAILED	1000 INPUT TO GND.		61	504	13
74F139	FSC	-	Digital, D	Decoder					Advanced STTL	STTL	
	426 0786 SS		1500 Ohms	100E-12 F	20 8621	3 FAILED	1000 INPUT TO GND.		61	204	13
74F151	FSC	-	Digital, M	Multiplexer					Advanced SITL	STTL	
	426 0686 SS		1500 Ohms	100E-12 F	20 8620	3 FAILED	1000 INPUT TO GND.		19	204	13
74F153	FSC	-	Digital, M	Multiplexer					Advanced STTL	STTL	
	426 0886	SS	1500 Ohms	100E-12 F	30 8630	3 FAILED	2000 INPUT TO GND.		61	504	13
746157	FSC	-	Digital, M	Multiplexer					Advanced STTL	STTL	
	426 0786 SS	SS	1500 Ohms	100E-12 F	20 8622	3 FAILED	1000 INPUT TO GND.		61	504	13
74£158	SS		Digital, M	Multiplexer					Advanced	J STTL	
	426 1056 SS	SS	1500 Ohms	100E-12 F	20 8623	3 FAILED	1000 INPUT TO GND.		61	504	13
745150	FSC		Digital, C	Counter/Divider	Ĺ				Advanced STTL	J STTL	
	426 0686 SS	SS	1500 Ohms	100E-12 F	30 8425	3 FAILED	2000 INPUT TO GND.		61	504	13

Part Number 74F151	10 ±1 91	<u>ription</u> tal, Counter/Divide				Technology Advanced STTL	یے	ı
	Test Test Test Test Source Date Type Resis	Test <u>Stance Capacitance</u> <u>Ohms 100E-12 F</u>	Date Code 8637	비유	Voltage Pin Combination 2000 INPUT TO GNO.	Failure Test Criteria Remarks 61 204	rst General marks Remarks 204 13	ral rks 13
74.F163	FSC 1 Digital,	tal, Counter/Divider				Advanced SITL	STTL	
	426 1286 SS 1500	1500 Ohms 100E-12 F	30 8637	3 FAILED	2000 INPUT TO GND.	61	504	13
74F164	FSC 1 Digital,	tal, Register, Shift				Advanced STIL	STTL	
	426 0686 SS 1500 Ohms	Ohms 100E·12 F	30 8619	3 FAILED	2000 INPUT TO GND.	61	504	13
745168	FSC 1 Digital,	tal, Counter/Divider				Advanced STTL	STTL	
	426 1086 SS 1500 Ohms	Ohms 100E-12 F	20 8636	3 FAILED	1000 INPUT TO GND.	19	204	13
746169	FSC 1 Digital,	tal, Counter/Divider				Advanced STTL	STTL	
	426 0986 SS 1500 Ohms	Ohms 100E-12 F	20 8634	3 FAILED	1000 INPUT TO GND.	19	504	13
745174	FSC 1 Digital,	tal, flip-flop				Advanced STTL	STTL	
	426 0986 SS 1500 Ohms	Ohms 100E-12 F	20 8636	3 FAILED	1000 IMPUT TO GMD.	61	504	13
74F175	FSC 1 Digital,	al, Flip-Flop				Advanced STTL	STTL	
	198 0881 GN 1500 Ohms	Ohms 100E-12 F	1 N/R	1 PASSED 1 PASSED 2 FAILED	1250 IN.(1)(+) COM.(8)(-) 1250 IN.(4)(+) COM.(8)(-) 1250 IN.(5)(+) COM.(8)(-)	51 51	252 252 252	£1 £1

Tost Tost Test Test		Number Date	Number Test	fest	Faiture	Test	Generat
	Capac - tance	Pulses Code	Devices Results	Voltage Pin Combination	Criteria	Remarks	Remarks
		1 N/R	2 :A1. E3				13
			0.4884E	(3)(8)(WOO)(+)(2)(N)(N) /(S).		252	13
			1 PASSES	(-)(s) 'Woo' (+)(\$) No s so:	51	252	3,3
			1 5 48850	1250 UUI.(2)(+) CUM.(3)(-)	5.1	252	13
			1 PA - 55	1250 OUI.(3)(+) COM.(8)(-)	5.1	252	3
			1 PASSED	1250 OUT.(6)(+) COM.(8)(·)	51	252	, 3
			1 PASSED	1250 OUT.(7)(+) COM.(8)(-)	51	252	13
			1 PASSED	1250 OUT.(10)(+) COM.(8)(-)	51	252	13
			1 PASSED	1250 OUT.(11)(+) COM.(8)(-)	1.2	252	13
			1 PASSED	1250 OUI(14)(+) COM.(8)(-)	51	252	13
			1 PASSED	1250 OUT.(15)(+) COM.(8)(-)	51	252	13
			1 PASSED	1250 IN.(4)(+) OUT.(2)(-)	51	252	13
			1 PASSED	1250 IN.(4)(+) OUT.(3)(-)	51	252	13
			2 FAILED	1250 IN.(5)(+) OUT.(6)(-)	51	252	13
			1 PASSED	1250 IN.(5)(+) OUT.(7)(-)	51	252	13
			2 FAILED	1250 IN.(12)(+) OUT.(10)(-)	51	252	13
			1 FAILED	1250 IN.(12)(+) OUT.(11)(-)	51	252	13
			1 PASSED	1250 IN.(12)(+) OUT.(11)(-)	51	252	13
			1 PASSED	1250 IN.(13)(+) OUT.(14)(-)	51	252	13
			1 FAILED	1250 IN.(13)(+) OUT.(15)(-)	51	252	13
			1 PASSED	1250 IN.(13)(+) OUT.(15)(-)	51	252	13
			2 PASSED	1250 VCC(16)(+) COM.(8)(-)	51	252	13
1500 Ohms	100E-12 F	1 N/R	1 PASSED	1250 IN.(4)(+) COM.(8)(·)	7	252	13
			2 FAILED	1250 IN.(1)(+) OUI.(2)(-)	7	252	13
1500 Ohms	100E-12 F	1 N/R	2 FAILED	5000 IN.(1)(+) COM.(8)(-)	7	252	13
			2 FAILED	5000 IN.(4)(+) COM.(8)(-)	7	252	13
			2 FAILED	5000 IN.(5)(+) COM.(8)(-)	4	252	13
			2 FAILED	5000 IN.(9)(+) COM.(8)(-)	7	252	13
			2 FAILED	5000 IN.(12)(+) COM.(8)(-)	7	252	13
			2 FAILED	5000 IN.(13)(+) COM.(8)(·)	7	252	13
			1 PASSED	5000 OUT.(2)(+) COM.(8)(+)	4	252	13

		Generat	Remarks	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
λb	STTL	Test	Remarks	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252
Technology	Advanced STTL	Faiture	Criteria R	7	7	7	7	7	7	7	7	7	7	7	7	7	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51
		Test	Voltage Pin Combination	5000 OUT.(3)(+) COM.(8)(-)	5000 OUT.(6)(+) COM.(_)(-)	5000 OUT.(7)(+) COM.(8)(-)	5000 OUT.(10)(+) COM.(8)(-)	5000 OUT.(11)(+) COM.(8)(-)	5000 OUT.(14)(+) COM.(8)(-)	5000 OUT.(15)(+) COM.(8)(-)	5000 IN.(4)(+) OUT.(2)(-)	5000 IN.(5)(+) OUT.(7)(-)	5000 IN.(9)(+) OUT.(2)(-)	5000 IN.(12)(+) OUT.(11)(-)	5000 IN.(13)(+) OUT.('4)(-)	5000 VCC(16)(+) COM.(8)(-)	1250 IN.(2)(+) COM.(8)(-)	1250 IN.(4)(+) COM.(8)(·)	1250 IN.(5)(+) COM.(8)(-)	1250 IN.(9)(+) COM.(8)(-)	1250 IN.(12)(+) COM.(8)(-)	1250 IN.(13)(+) COM.(8)(-)	1250 IN.(13)(+) COM.(8)(-)	1250 OUT.(2)(+) COM.(8)(-)	1250 OUI.(3)(+) COM.(8)(-)	1250 OUT.(6)(+) COM.(8)(-)	1250 OUT.(7)(+) COM.(8)(-)	1250 OUT.(10)(+) COM.(8)(-)	1250 OUT.(11)(+) COM.(8)(-)	1250 OUT.(14)(+) COM.(8)(-)	1250 OUT.(15)(+) COM.(8)(-)	1250 IN.(1)(+) OUT.(2)(-)		1250 IN.(5)(+) OUT.(7)(-)	1250 IN.(9)(+) OUT.(7)(-)
		Date Number Test I	Devices Result V	1 PASSED	1 PASSED	1 PASSED	1 PASSED	1 PASSED	1 PASSED	1 PASSED	2 FAILED	2 FAILED	2 FAILED	2 FAILED	2 FAILED	1 PASSED	2 FAILED	2 PASSED	2 PASSED	2 PASSED	2 PASSED	1 PASSED	1 FAILED	2 PASSED	2 PASSED	2 PASSED	2 PASSED	2 FAILED	2 PASSED	2 PASSED	1 FAILED				
		Number Date	Pulses Code	1 N/R													1 N/R																		
	flip-flup	jsa.	Capacitance	100E-12 F													100E-12 F																		
Sesembtion	Digital,	fost	Source Date Type Resistance	1500 Ohms													1500 Ohms																		
0.03	-	Test Tost Tost	te Iype	R GN													N S N																		
061 144 (01460)	182	1965	Source Da	200 N/													201 N/R																		

		General	Remarks	. 13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	;	13	13	13
37	STTL	Test	Remarks	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	1	252	252	252
Technology	Advanced SIIL	Failure I	Criteria Re	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	1;	51		7	7	51
		Test	Voltage Pin Combination	1250 IN.(9)(+) OUT.(7)(-)	1250 IN.(12)(+) OUT.(10)(-)	1250 IN.(13)(+) OUT.(15)(-)	1250 VCC(16)(+) COM.(8)(-)	5000 IN.(4)(+) COM.(8)(-)	5000 IN.(5)(+) COM.(8)(-)	5000 IN.(9)(+) COM.(8)(-)	5000 IN.(12)(+) COM.(8)(-)	5000 IN.(13)(+) COM.(8)(-)	5000 OUT.(2)(+) COM.(8)(-)	5000 OUT.(3)(+) COM.(8)(-)	5000 OUT.(6)(+) COM.(8)(-)	5000 OUT.(7)(+) COM.(8)(-)	5000 OUT.(10)(+) COM.(8)(-)	5000 OUT.(11)(+) COM.(8)(-)	5000 OUT.(14)(+) COM.(8)(-)	5000 OUT.(15)(+) COM.(8)(-)	5000 IN.(4)(+) OUT.(2)(-)	5000 IN.(5)(+) OUT.(7)(-)	5000 IN.(9)(+) OUI.(7)(-)	5000 IN.(12)(+) OUT.(10)(-)	5000 IN.(13)(+) OUT.(15)(-)	5000 VCC(16)(+) COM.(8)(-)	1000 IN.(5)(+) COM.(8)(-)	1000 IN.(5)(+) COM.(8)(-)		1000 IN.(1)(+) OUT.(2)(-)	4000 IN.(4)(+) COM.(8)(-)	1000 IN.(1)(+) COM.(8)(-)
		Test	Devices Result V	1 PASSED	2 PASSED	2 PASSED	2 PASSED	2 FAILED	2 FAILED	2 FAILED	2 FAILED	1 FAILED	2 PASSED	2 PASSED	2 PASSED	2 PASSED	2 FAILED	2 FAILED	1 FAILED	2 FAILED	2 FAILED	2 PASSED	2 FAILED	8 PASSED		10 PASSED	2 FAILED	2 FAILED				
		Number Date Number	Pulses Code	1 N/R				1 N/R																			1 N/R			1 N/R	1 N/R	1 N/R
C	Flip-Flop	Test	Capaci tance	100E-12 F				100E-12 F																			100E-12 F			100E-12 F	100E-12 F	100E-12 F
Part Description	Digital, F	Test	Resistance					1500 Ohms																			1500 Ohms			1500 Ohms	1500 Ohms	1500 Ohms
ESD	-	Test Test Test	Source Date Type	NS ~				NS ~																			0881 GN			S ~	3	₹
Part ESD Mtr Cla	FSC		rce Dat	N/R				N/R																						N/N	N/R	N/R
(Cont'd)		Test	Sour	201				202																			203			204	205	206
Part	746175																															

		General	Remarks	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13		13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
λ6	STTL	Test	Remarks	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252		252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252
Technology	Advanced STTL	Failure I	Criteria R	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51		7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	51
		Test	Voltage Pin Combination	500 IN.(1)(+) APII(-)	800 IN.(4)(+) APTT(-)	700 IN.(5)(+) APTT(-)	600 IN.(9)(+) APTT(-)	1250 IN.(12)(+) APTT(-)	1000 IN.(13)(+) APTT(-)	1250 OUT.(2)(+) APTT(-)	1250 OUI.(3)(+) APII(-)	1250 OUT.(6)(+) APTT(-)	1250 OUT.(7)(+) APTT(-)	1250 OUT.(10)(+) APTI(-)	1250 OUT.(11)(+) APTI(-)	1250 OUT.(14)(+) APTT(-)	1250 OUT.(15)(+) APTT(-)	1250 VCC(16)(+) APII(-)		1800 IN. (1)(+) APII(-)			1800 IN.(9)(+) APTT(-)	2200 IN.(12)(+) APIT(-)	2600 IN.(13)(+) APTT(-)	5000 OUT.(2)(+) APIT(-)	5000 OUT.(3)(+) APIT(-)	5000 OUT.(6)(+) APTT(-)	5000 OUT.(7)(+) APIT(-)	5000 OUT.(10)(+) APTT(-)	5000 OUT.(11)(+) APTT(-)	5000 OUT.(14)(+) APTT(-)	5000 OUT.(15)(+) APTT(-)	5000 VCC(16)(+) APII(-)	500 IN.(1)(+) APTT(-)
		Test	Devices Result	1 FAILED	1 FAILED	1 PASSED	1 PASSED	1 PASSED	1 PASSED	1 PASSED		1 FAILED	4 FAILED	1 FAILED	1 FAILED	1 FAILED	1 FAILED	1 PASSED	1 PASSED	1 PASSED	1 PASSED	1 PASSED	1 FAILED												
		Number Date Number	Pulses Code	1 N/R																1 N/R															1 N/R
ion	Flip∸fləp	Test	Capacitance	100E-12 F																100E-12 F															100E-12 F
Descript	Digital, F	fest Test	Resistance	1500 Ohms															6	1500 Ohms															1500 Ohms
Class	-	Test Test	Date Type	981 SS																N/R SS															N/R SS
(Contid) Mfr	FSC	Test Te	ા	207 05																208 N/															209 N/

ļ		General	Remarks 13	. £	13	13	13	13	13	13	13	13	13	13	13	13	ć	>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	c) (0
89	STTL		Remarks R	252	252	252	252	252	252	252	252	252	252	252	252	252	ć	707	262	292	262	292	292	592	292	292	592	592	592	592	592	292	243	702	292
Technology	Advanced STIL		Criteria R	51	51	51	51	51	51	51	51	51	51	51	51	51	i	7	51	51	51	51	51	51	51	51	51	51	51	51	51	51	~	,	4
			Voltage Pin Combination			400 IN.(12)(+) APTT(-)	800 IN.(13)(+) APTT(-)	5000 OUT.(2)(+) APTT(-)	5000 OUT.(3)(+) APTT(-)	5000 OUT.(6)(+) APIT(-)	5000 OUT.(7)(+) APTT(-)	5000 OUT.(10)(+) APTI(-)	5000 OUT.(11)(+) APTT(-)	5000 OUT.(14)(+) APTI(-)	5000 OUT.(15)(+) APTT(-)	5000 VCC(16)(+) APIT(-)				1250 IN.(5)(+)	1000 IN.(9)(+)	1250 INPUT(12)(+)	1250 IN.(13)(+)	1250 OUT.(2)(+)	1250 OUT.(3)、+)	1250 OUT.(6)(+)	1250 OUT.(7)(+)	1250 OUT.(10)(+)	1250 OUT.(11)(+)	1250 OUT.(14)(+)	1250 OUT.(15)(+)	1250 VCC(16)(+)	(*)(1) N1 0066	2500 IN:(I)(+)	1400 IN.(4)(+)
		Test	Devices Result Vo	1 FAILED	1 FAILED	1 FAILED	1 FAILED	1 PASSED	1 PASSED	1 PASSED	1 PASSED	1 PASSED	•	I PASSED	1 PASSED	1 PASSED	1 FAILED	1 PASSED	1 PASSED	1 PASSED	1 PASSED	1 PASSED	1 PASSED	1 PASSED	1 PASSED	1 PASSED	1 PASSED	1 PASSED	4	- rAireu	1 FAILED				
		Number Date	Putses Code															X/X															2	X -	
	Flip-Flop	Test	Capacitance															100E-12 F															1000	100E - 12 F	
Part <u>Description</u>	i	Test	Source Date Type Resistance															1500 Ohms															100 Ota	Smino ooci	
ESD	-	Test Test Test	Date Type	}														0 981 SS															ć	20 X/X	
1	FSC	fest Te	Source Da															210 04																/N 112	
(Cont'd)	i	Ţę	ઝાર	í													į	.7															ř	7	
Part Number	74F175																																		

1],	General	Remarks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	c	0	0	0	0	0	0	0	0		13	13
λδί	1 STTL	Test	Remarks	292	292	262	262	292	292	262	292	292	292	292	292	292	262	292	292	292	262	292	262	292	292	292	292	292	292	292	292		252	252
Technology	Advanced STIL	Failure I	Criteria	7	4	7	7	7	7	7	7	7	7	7	7	7	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	i	51	51
		Test		2200 IN.(5)(+)	2200 IN.(9)(+)	3000 IN.(12)(+)	2200 IN.(13)(+)	5000 OUT.(2)(+)	5000 OUT.(3)(+)	5000 OUT.(6)(+)	5000 OUT.(7)(+)	5000 OUT.(10)(+)	5000 OUT.(11)(+)	5000 OUT.(14)(+)	5000 OUT.(15)(+)	5000 VCC(16)(+)	4700 IN.(1)(+)	4600 IN.(4)(+)	4600 IN.(5)(+)	2200 IN.(9)(+)	3000 IN.(12)(+)	4600 IN.(13)(+)	5000 OUT.(2)(+)	5000 OUT.(3)(+)	5000 OUT.(6)(+)	5000 OUT.(7)(+)	5000 OUT.(10)(+)	5000 OUT.(11)(+)	5000 OUT.(14)(+)	5000 OUT.(15)(+)	5000 VCC(16)(+)		360 IN.(9)(+) APTT(-)	480 IN.(9)(+) APTT(-)
		Test		1 FAILED	1 FAILED	1 FAILED	1 FAILED	1 PASSED	1 PASSED	1 PASSED	1 PASSED	1 PASSED	1 FAILED	1 FAILED	1 PASSED	1 PASSED	1 PASSED	1 PASSED	1 PASSED		1 FAILED	1 FAILED												
		Number	Pulses Code	1 N/R													1 N/R															:	100 N/R	100 N/R
c	flip-flop			100E-12 F													100E-12 F																100E-12 F	100E-12 F
Part Description	Digital, F	Test	Resistance	1500 Ohms													1500 Ohms															0	SmyO ODCI	1500 Ohms
Part ESD Mfr Class	FSC 1	Test Test Test	Source Date Type Resistance	N/R SS													N/R SS															600	0.981 5.5	0981 SS
(Cont'd)		Test	Source	211													212															212	CIZ	214

}	General Remarks 13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
997 1 STTL	Test G Remarks R 252	252	252	252	252	252	252 252	252	252	252	252	252	252	252	252	252	252
Technology Advanced SITL	Failure 1 Criteria F	51	51	51	51	51	51	51	4	4	7	7	4	7	4	7	51
	Test Test Result Voltage Pin Combination PASSED 180 IN.(9)(+) APTT(-)	180 IN.(9)(+) APTI(-)	180 IN.(9)(+) APTT(-)	480 IN.(9)(+) APTI(-)	600 IN.(9)(+) APTT(-)	360 IN.(9)(+) APTT(-)	480 IN.(9)(+) APTT(-) 480 IN.(9)(+) APTT(-)	480 IN.(9)(+) APTT(-)	300 IN.(5)(+) APTT(-)	150 IN.(5)(+) APTI(-)	150 IN.(5)(+) APTT(-)	300 IN.(5)(+) APTT(-)	300 IN.(5)(+) APTT(-)	300 IN.(5)(+) APTT(-)	400 IN.(5)(+) APTT(-)	400 IN.(5)(+) APII(-)	320 IN.(9)(+) APTT(-)
		1 PASSED	1 PASSED	1 FAILED	1 FAILED	1 FAILED	1 FAILED 1 PASSED	1 PASSED	2 FAILED	1 FAILED	1 FAILED	1 FAILED	1 FAILED	1 FAILED	1 FAILED	4 FAILED	2 FAILED
	Number Date Pulses Code 30 N/R	100 N/R	300 N/R	30 N/R	30 N/R	100 N/R	30 N/R	300 N/R	100 N/R	30 N/R	100 N/R	10 N/R	10 N/R	30 N/R	30 N/R	100 N/R	300 N/R
on Flip-Flop	Test Capacitance 100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F
Part <u>Description</u> Digital, Fl	Test Resistance 1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms
Part ESD Mfr Class FSC 1	Test Test Test Source Date Type 215 0981 GN	0981 GN	0981 GN	0981 SS	0981 GN	0981 GN	0981 GN	0981 GN	N/R SS	N/R GN	N/R GN	N/R SS	N/R GN	N/R GN	N/R GN	N/R GN	N/R SS
(Cont'd)	Test Sourc 215	215	215	216	217	217	218	218	219	220	220	221	222	222	223	223	557
Fart Number 74F175																	

		Remarks 13	0	15	15	0	0	16	0	13		13		÷		. 13		t 13
STTL	Test	emarks 252	292	292	292	292	292	262	592	504	STTL	204	STTL	507	STTL	204	3 STTL	204
Advanced STTL	Failure	Criteria Remarks 51 252	51	7	7	7	7	7	7	61	Advanced STTL	61	Advanced STIL	61	Advanced STTL	61	Advanced STTL	61
	Test	Voltage Pin Combination 320 IN.(9)(+) APIT(-)	800 IN.(9)(+)	1120 IN.(4)(+)	1120 IN.(4)(+)	840 IN.(4)(+)	1120 IN.(4)(+)	420 IN.(4)(+)	1120 IN.(4)(+)	600 INPUT TO GND.		1000 INPUT TO GND.		1000 INPUT TO GND.		2000 INPUT TO GND.		2000 INPUT TO GND.
	Test	Devices Result Vo 3 PASSED	5 PASSED	1 FAILED	2 PASSED	1 FAILED	1 PASSED	1 FAILED	1 PASSED	3 FAILED		3 FAILED		3 FAILED		3 FAILED		3 FAILED
	Date	Pulses Code D 300 N/R	300 N/R	30 N/R	300 N/R	10 N/R	300 N/R	300 N/R	300 N/R	10 N/R		20 8503		20 8637		30 8446		30 8635
Digital, Flip-flop	Test	Resistance Capacitance Pu 1500 Ohms 100E-12 F	1500 Ohms 100F-12 F	1500 Ohms 100E-12 F	Digital, Counter/Divider	1500 Ohms 100E-12 F	Digital, Counter/Divider	1500 Ohms 100E-12 F	Digital, Counter/Divider	1500 Ohms 100E-12 F	Digital, Counter/Divider	1500 Ohms 100E-12 F						
FSC	Test Test	Date Type N/R SS	0981 SS	N/R SS	N/R SS	N/R SS	N/R SS	N/R GN	N/R GN	0786 SS	FSC 1	SS 9860	FSC 1	1086 SS	FSC 1	SS 9860	FSC 1	1086 SS
	Test	Source 224	225	526	526	227	228	556	230	759	ů.	756	u.	756	•	756	<u>u</u>	759
74F175											74F190		74F191		74F192		74F193	

ا	General Irks Remarks 252 13	204 13	204 13	-1	204 13	<u>ا</u> ۔	204 13	-1	204 13	-1-	204 13	11	204 13	1	204 13
Technology Advanced SITL	Failure Test Criteria Remarks 51 252	, 19	61	Advanced STTL	61	Advanced SITL	61	Advanced STTL	19	Advanced SITL	61	Advanced STIL	61	Advanced STTL	61
	Result Voltage Pin Combination FAILED 500 INPUT(4)(+) VCC(14)(-)	600 INPUT TO GND.	1000 INPUT TO GND.		600 INPUT TO GND.		600 INPUT TO GND.		1000 INPUT TO GND.		1000 INPUT TO GND.		2000 INPUT TO GND.		600 INPUT TO GND.
		3 FAILED	3 FAILED		3 FAILED		3 FAILED		3 FAILED		3 FAILED		3 FAILED		3 FAILED
	Number Date Number Pulses Code Devices 1 N/R	10 N/R	20 N/R	ب	10 8616	ŗ.	10 8637		20 8450	۵	20 8629		30 8629		10 8414
Part <u>Description</u> Digital, Gate	Test Stance Capacitance Ohms 100E-12 F	1500 Ohms 100E-12 F	1500 Ohms 100E-12 F	Digital, Line/Bus Driver	1500 Ohms 100E-12 F	Digital, Line/Bus Driver	1500 Ohms 100E-12 F	Digital, Transceiver	1500 Ohms 100E-12 F	Digital, Line/Bus Driver	1500 Ohms 100E-12 F	Digital, Transceiver	1500 Ohms 100E-12 F	Digital, Multiplexer	1500 Ohms 100E-12 F
Part ESD Mfr Class FSC 1	ce Date Type 0681 GN	s 9820 s	\$ 0686 \$\$	FSC 1	s 9890 s	FSC 1	s 1086 SS	FSC 1	ss 9860 s	FSC 1	ss 9880 s	FSC 1	6 0886 SS	FSC 1	6 1186 SS
	Source 049	759	927	0,	925	5	927	43	927	77	927	45	759	51	759
Part Number 74F20				745240		745241		74F243		745244		74F245		74F251	

Part Number		Part ESD Mfr Class	SS	Part De: cription	ç					Technology	>	
74F253				Digital, P	Multiplexer		j	3		Advanced STTL	STTL	
	Sour	Source Date Type Resistance	est 1	lest tesistance	Test Capacitance	Number Date Number Test	و اب	Test Voltage Pin C	ombination	Failure Test <u>Criteria Remarks</u>		General Remarks
	774			SWUO DOCI	100E - 12 P	ZU 8657	5 FAILED	TUUU INPUT TO GND.	TO GND.	61	504	13
74F257		FSC	-	nigital, A	Digital, Multiplexer					Advanced STTL	I STTL	
	927	1186 SS		150° Ohms	100E-12 F	20 8621	3 FAILED	1000 INPUT TO GND.	TO GND.	61	504	13
74F258		FSC	1 0	ijgital, N	Di _s ital, Multiplexer					Advanced STTL	I STTL	
	925	1186 SS		15CJ Ohms	100E-12 F	10 8631	3 FAILED	600 INPUT TO GND.	TO GND.	61	204	13
74F283		FSC	0	Digital, C	Counter/Divider	Ĺ				Advanced STTL	STTL	
	756	1286 SS		15(0 Ohms	100E-12 F	10 N/R	3 FAILED	600 INPUT TO GND.	TO GND.	61	504	13
74F299		FSC	1 0	Dijital, R	Register, Shift	.				Advanced STTL	STTL	
	927	0786 SS		15co Ohms	100E-12 F	20 8622	3 FAILED	1000 INPUT TO GND.	TO GND.	61	204	13
74F32		FSC	-	Digital, Gate	iate					Advanced STIL	STTL	
	759	0786 SS		1500 Ohms	100E-12 F	30 8624	3 FAILED	2000 INPUT TO GND.	TO GND.	61	504	13
74F322		FSC	1 0	Digital, A	Arithmetic, Logic Unit	gic Unit				Advanced STIL	STTL	
	426	ss 9860		1500 Ohms	100E-12 F	20 8612	3 FAILED	1000 INPUT TO GND.	TO GND.	19	204	13
74F323		FSC	1 0	Digital, R	Register, Shift					Advanced STTL	STTL	
	759	1086 SS		1500 Ohms	100E-12 F	20 8627	3 FAILED	1000 INPUT TO GND.	TO GND.	61	504	13

Part		Part ESD Mfr Class	Part	ç				Technology	
74F350				Digital, Register, Shift	ft			Advanced STE	
	Test	: Test Test Test	t Test	Test	Number Date Number	Fest	Test	Failure Test	the section of
	Sour	ce Date Typ	e Resistand	Source Date Type Resistance Capacitance Pulses	Pulses Code Dev	Code Devices Result Vo	Voltage Pin Combination	Criteria Remarks Remark	ALKINGG SAIR
	759	0986 SS	1500 Ohms	s 100E-12 F	10 8604	3 FAILED	600 INPUT TO GND.	61	204 13
74F352		FSC 1	Digital,	Digital, Multiplexer				Advanced SIIL	77L
	927	SS 9860		1500 Ohms 100E-12 F	20 8452	3 FAILED	1000 INPUT TO GND.	61	204 13
74F353		FSC 1		Digital, Multiplexer				Advanced STTL	ות
	927	1086 SS		1500 Ohms 100E-12 F	20 8616	3 FAILED	1000 INPUT TO GND.	61	204 13
									į
74F373		FSC	1 Digital, Latch	Latch				Advanced STTL	77.
	927	0886 SS		1500 Ohms 100E-12 F	20 8628	3 FAILED	1000 INPUT TO GND.	61	204 13
745374		FSC	1 Dìgital,	Dìgital, Flìp-Flop				Advanced STTL	77.
	927	SS 9860		1500 Ohms 100E-12 F	10 8635	3 FAILED	600 INPUT TO GND.	61	204 13
74F378		180	1 Digital,	Digital, Flip-Flop, D				Advanced STTL	18 L
	927	ss 9860		1500 Ohms 100E-12 F	30 8636	3 FAILED	2000 INPUT TO GND.	61	204 13
745379		FSC	1 Digital,	, Flip-Flop, D				Advanced STTL	77 L
	925	1086 SS		1500 Ohms 100E-12 F	10 8634	3 FAILED	600 INPUT TO GND.	61	204 13
74F39B		FSC	1 Digital,	, Multiplexer				Advanced STTL	TTL
	426	0686 SS		1500 Ohms 100E-12 F	10 8408	3 FAILED	600 INPUT TO GND.	61	204 13

Part Number 746399		Part ESD Mfr Clas	%l ←	Part <u>Description</u> Digital, Mul	ion Multiplexer				Technoti 92Advanced_STIL	97	
	Source 426	Test Test Test Test Source Date Type Resis 426 1086 SS 1500	rest Type	Test <u>Resistance</u> 1500 Ohms	Test Test Resistance Capacitance F	Number Date Number Test Pulses Code Devices Resul 10 8637 3 FAILE	비유	Voltage Pin Combination 600 INPUT TO GND.	Failure Test Criteria Remarks 61 204		General Remarks 13
74F533	759	FSC	_	Digital, Latch 1500 Ohms 100E-12 F	Latch ; 100E-12 F	20 8616	3 FAILED	1000 INPUT TO GND.	Advanced STIL 61 20	3 STTL 204	13
74534	759	FSC 1086	↓ SS	Digital, Fl	Flip-flop 100E-12 F	20 8632	3 FAILED	1000 INPUT TO GND.	Advanced STTL 61 20	3 STTL 204	13
74F543	426	FSC	_	Digital, Transceiver 1500 Ohms 100E-12 F	ransceiver 100E-12 F	30 8610	3 FAILED	2000 INPUT TO GND.	Advanced STTL 61 20	3 STTL 204	13
745547	426	FSC 0986 SS	_	Digital, De 1500 Ohms	Decoder s 100E-12 F	10 8502	3 FAILED	600 INPUT TO GND.	Advanced STTL 61 20	4 STTL 204	13
74548	759	FSC 0986	SS	Digital, De 1500 Ohms	Decoder 100E-12 F	20 8630	3 FAILED	1000 INPUT TO GND.	Advanced STTL 61 20	3 STTL 204	13
74F569	759	FSC 0986 SS	-	Digital, Counter/Div 1500 Ohms 100E-12 F	Counter/Divider 100E-12 F	20 N/R	3 FAILED	1000 INPUT TO GND.	Advanced STTL 61 20	3 STTL 204	13
74564	927	FSC 0886 SS	<u>-</u>	Digital, Ga 1500 Ohms	Gate ; 100E-12 F	20 8629	3 FAILED	1000 INPUT MTO GND.	Advanced STTL 61 20	3 STTL 204	13

Part Number 74.F74		Part ESD Mfr Clar	ESD Class		ripti tal,	on Flip-flop				Technology Advanced STIL	STTL	1
	Sour 426	Test Test Test Test Source Date Type Resist 426 0986 SS 1500	t Test E Type 5 SS	t Tesi e Resi 1500	Test Resistance 1500 Ohms	Test Capacitance 100E-12 F	Number Date Number Test Pulses Code Devices Resu 10 8635 3 FAIL!	<u>۵</u> ا <u>د</u>	Test Voltage Pin Combination 600 INPUT TO GND.	Failure Test Criteria Rema	7ks	General Remarks 13
74F86		FSC	-	Díg	Digital, G	Gate				Advanced STTL	STTL	
	426	0884	0886 SS	150(1500 Ohms	100E-12 F	20 8625	3 FAILED	1000 INPUT TO GND.	61	504	13
74400		TEX	2		Digital, G	Gate				HTTL		
	059	N/R	N/R		Ohms	1500 Ohms 100E-12 F	1 N/R	1 FAILED	3205 N/R	102	188	13
74405		TEX	Z		Digital, I	Inverter, Buffer				HTTL		
	059	N/R	N/R	150(N/R 1500 Ohms	100E-12 F	1 N/R	1 FAILED	21697 N/R	102	188	13
744106		N/R	*-	Dig	Digital, F	Flip-Flop				HTTL		
	234	N/R	SS	0	Ohms	Z/R	1 N/R	1 FAILED 1 FAILED 1 FAILED	300 IN.(9)(+) GND(13)(-) 300 IN.(9)(+) GND(13)(-) 300 IN.(9)(+) GND(13)(-)	108 108	222 211 210	ឯឯឯ
	235	N/R	SS	0	Ohms	120E-12 F	1 N/R	3 FAILED 1 FAILED 1 FAILED	200 IN.(9)(+) GND(8)(-) 200 IN.(9)(+) GND(8)(-) 200 IN.(9)(+) GND(8)(-)	108 108	220 218 221	ឯឯឯ
	236	X/X	SS	0	Ohms	510E-12 F		1 FAILED 1 FAILED 1 FAILED 2 FAILED	100 IN.(8)(+) GND(13)(-) 100 IN.(9)(+) GND(13)(-) 100 IN.(9)(+) GND(13)(-) 100 IN.(8,9)(+) GND(13)(-)	108 108 108	223 209 206 208	<u> </u>
	237	N/R	SS	0	Ohms	.01E-07 F	1 N/R	1 FAILED	200 IN.(8)(+) GND(13)(-)	108	219	13

	General Remarks 13 13 13	51 21		13		13		13		13		13
37	Test G Remarks R 209 207 209 252	252		252		252		252		252		252
Technology HTTL	Failure To Criteria Re 108 108 108 108 108 108 108	108	HMOS	102 102	HMOS	102 102	HMOS	102 102	HMOS	102 102	HMOS	102
	Voltage Pin Combination 200 IN.(8,9)(+) GND(13)(-) 100 IN.(9)(+) GND(13)(-) 100 IN.(8,9)(+) GND(13)(-) 100 IN.(1,8,9)(+) GND(-)	100 IN(1,8,9)(+) GND(-) 100 IN(8,9)(+) GND(13)(-)		2000 N/R 1100 N/R		2000 N/R 2000 N/R		2000 N/R 4120 PINS 4-7 & 1-3		2000 N/R 4120 PINS 7-8		2000 N/R
	Test Result FAILED FAILED FAILED	2 FAILED 2 FAILED		10 PASSED 2 FAILED		10 PASSED 10 PASSED		15 PASSED 6 FAILED		15 PASSED 1 FAILED		15 PASSED
	Number Date Pulses Code 1 N/R	1 N/R		5 N/R		5 N/R		5 N/R		5 N/R		5 N/R
Part ESD Part N/R 1 Digital, Flip-Flop	Source Date Type Resistance Capacitance 237 N/R SS 0 Ohms .01E-07 F	238 N/R SS 0 Ohms .01E-06 F	MOT 1 Digital, Gate	399 0883 GN 1500 Ohms 100E-12 F	NSC 2 Digital, Gate	399 0883 GN 1500 Ohms 100E-12 F	RCA 3 Digital, Gate	399 0684 GN 1500 Ohms 100E-12 F	TEX 3 Digital, Gate	399 0684 GM 1500 Ohms 100E-12 F	SIG 2 Digital, Gate	399 0185 GN 1500 0hms 100E-12 F
Part Number (Cont'd) 74H106			74HC00		74HC00		74HC00		74HC00		74HC00	

Part Number	Part ESO Part Mtr Class Description	755 (0.14)	75	
744004	SIG 1 Digital, Inverter, Buffer	HMOS		
	Test Number		fest	General
	rce Date Type Resistance Capacitance Pulses Code Devices Result Voltage Pin Combinati	Criteria	Remarks	Remarks
	100E-12 F 1 N/R 1 FAILED	77	252	19
	1 FAILED 2150 INPUT(13)(+) GND(7)(-)	777	252	\$
	1 FAILED 2150 INPUT(13)(+) GND(7)(·)	77	252	c
	1 FAILED 2175 INPUT(13)(+) GND(7)(-)	55	252	<u>o</u>
	1 FAILED 2225 INPUT(13)(+) GND(7)(-)	55	252	19
	1 FAILED 2225 INPUT(13)(+) GND(7)(-)	77	252	9
	1 FAILED 2250 INPUT(13)(+) GND(7)(-)	77	252	19
	1 FAILED 2275 INPUT(13)(+) GND(7)(-)	55	252	19
	1 FAILED 2275 INPUT(13)(+) GND(7)(-)	77	252	19
	1 FAILED 2300 INPUT(13)(+) GND(7)(-)	77	252	19
	1 FAILED 2350 INPUT(13)(+) GND(7)(-)	77	252	19
	1 FAILED 2425 INPUT(13)(+) GND(7)(-)	77	252	19
	1 FAILED 2425 INPUT(13)(+) GND(7)(-)	5 7	252	19
	1 FAILED 2450 INPUT(13)(+) GND(7)(-)	77	252	19
	1 FAILED 2475 INPUT(13)(+) GND(7)(-)	77	252	19
	1 FAILED 2550 INPUT(13)(+) GND(7)(-)	77	252	19
	1 FAILED 2575 INPUT(13)(+) GND(7)(-)	77	252	19
		77	252	19
	1 FAILED 2675 INPUT(13)(+) GND(7)(-)	77	252	19
	1 FAILED 2675 INPUT(13)(+) GND(7)(-)	77	252	19
	1 FAILED 2775 INPUT(13)(+) GND(7)(-)	77	252	91
	1 FAILED 2775 INPUT(13)(+) GND(7)(-)	77	252	19
	1 FAILED 2850 INPUT(13)(+) GND(7)(-)	77	252	19
	1 FAILED 3950 INPUT(13)(+) GND(7)(-)	77	252	19
	1 FAILED 3050 INPUT(13)(+) GND(7)(-)	77	252	19
	1 FAILED 3600 INPUT(13)(+) GND(7)(-)	77	252	19
	1 FAILED 3850 INPUT(13)(+) GND(7)(-)	77	252	19
	1 FAILED 3925 INPUT(13)(+) GND(7)(-)	77	252	19
	1 FAILED 4150 INPUT(13)(+) GND(7)(-)	77	252	19
	1 FAILED 1975 INPUT(13)(+) GND(7)(-)	5 7	252	19
	1 FAILED 2100 INPUT(13)(+) GND(7)(-)	† †	252	19
		77	252	19
	1 FAILED 2325 INPUT(13)(+) GND(7)(-)	77	252	19

			Canerat	Remarks	19	19	19	19	19	19	19	19	19	6	19	19	19	19	19	19	19	19	19	19	19	5	9	19	19	19		13	13
>			lest (Remarks R	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252	252		252	252
Tachpalogo	SOLUTION:	SOM M	Failure 16	Criteria Re	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	77	55	7 7	7 7	77	77	77	77	NMOS	102	102
			Test	Voltage Pin Combination	2350 INPUT(13)(+) GND(7)(-)	2425 INPUT(13)(+) GND(7)(-)	2475 INPUT(13)(+) GND(7)(-)	2500 INPUT(13)(+) GND(7)(-)	2525 INPUT(13)(+) GND(7)(-)	2575 INPUT(13)(+) GND(7)(-)	2575 INPUT(13)(+) GND(7)(-)	2675 INPUT(13)(+) GND(7)(-)	2675 INPUT(13)(+) GND(7)(-)	2675 INPUT(13)(+) GND(7)(-)	2700 INPUT(13)(+) GND(7)(-)	2775 INPUT(13)(+) GND(7)(-)	2850 INPUT(13)(+) GND(7)(-)	2900 INPUT(13)(+) GND(7)(-)	2925 INPUT(13)(+) GND(7)(-)	2925 INPUT(13)(+) GND(7)(-)	2950 INPUT(13)(+) GND(7)(-)	2975 INPUT(13)(+) GND(7)(-)	2975 INPUT(13)(+) GND(7)(-)	3050 INPUT(13)(+) GND(7)(-)	3225 INPUT(13)(+) GND(7)(-)	3225 INPUT(13)(+) GND(7)(-)	3400 INPUT(13)(+) GND(7)(-)	3450 INPUT(13)(+) GND(7)(-)	3750 INPUT(13)(+) GND(7)(-)	3800 INPUT(13)(+) GND(7)(-)		2000 N/R	1100 N/R
			Test	Devices Result V		1 FAILED		10 PASSED	1 FAI' ED																								
	į		Number Date Number	Pulses Code D	×/8																											5 N/R	5 N/R
Ş		Inverter, Buffer	Test Nu	Capacitance	100E-12 F																										Counter/Divider	100E-12 F	100E-12 F
Part	מבירו ושרו	Digital,	Test	Resistance	1500 Ohms																										Digital, (1500 Ohms	1500 Ohms
Part ESD		216	Test Test Test	e Date Type	391 0886 SS 1500 0hms																										MOT 1	0883 GN	0886 GN
4 7	ı		Test	Source	391																										~	399	399
		100±17																													70.HC161		

Part Number (Cont'd) 74HC161	1	Part ESD Mfr Class NSC 2	8/2	Part <u>Description</u> Digital, Cou	on Counter/Divider	_				Technology HMOS	76	
	Test Source 399	Test Test Test <u>E Date Type Resis</u> 0883 GN 1500	est I <u>YPe R</u> N 1	Test Resistance 1500 Ohms	Test Capacitance 100E-12 F	Number Date Number Pulses Code Devices 5 N/R 10		Test	age Pin Combination 100 N/R 100 N/R	Criteria Remarks 102 252 102 252		General Remarks 13
74HC161	399	TEX 0684 GN	ю	Digital, C 1500 Ohms	Counter/Divider 100E-12 F	5 N/R	15 PASSED 9 FAILED		2000 N/R 4120 PINS 8-9, 8-12, & 4-13	нмоs 102 102	252	13
7.4C105	399	RCA 0684 GN	8	Digital, Register, 1500 Ohms 100E-12	Register, Shift . 100E-12 F	t 5 N/R	15 PASSED 6 FAILED		2000 N/R 4120 PINS 8-9 & 4-15	нмоs 102 102	252	13
744C195	399	S1G 0185 GN	CI.	Digital, R 1500 Ohms	Register, Shift . 100E-12 F	t 5 N/R	15 PASSED		2000 N/R	нмоѕ 102	252	13
25,100	926	TEX N/R N	3 D N/R	Digital, G 1500 Ohms	Digital, Gate 1500 Ohms 100E-12 F	1 N/R	1 FAILED		4031 N/R	רדדנ 102	188	13
741.71	029	7EX 8/8	3 D	Digital, ^c 1500 Ohms	<pre>clip.flop i 100E-12 f</pre>	1 N/R	1 FAILED		4692 N/R	LTTL 102	188	13
741.73	329	TEX N/R N	2 C	Digital, Fl 1500 Ohms	Flip-Flop . 1006-12 F	1 N/R	1 FAILED		2139 N/R	102	188	13

1 82	Part ESD Mfr Clas TEX Test Test Te	ESD Class 3	rt ESD Part Class Description X 3 Digital, Reg Test Test Test	ion Register, Shift Test N	ft Number Date Number	lest	170	Technology LTTL		
Sourc 029	ce Date N/R	Type N/R	Source Date Type Resistance 029 N/R N/R 1500 Ohms		Pulses 1	evices Result v	Code Devices Result Voltage Pin Combination N/R 1 FAILED 4642 N/R	Criteria F	% 88 8	Remarks 13
	MOT	-	Digital, Gate	Gate				LSTTL		
027	X / X	25	1500 Ohms	s 100E-12 F	1 N/R	2 FAILED 13 PASSED	1000 N/R 1000 N/R	<u>7</u> 47	252 252	12
	FSC	-	Digital, Gate	Gate				וצדור		
	426 0986 SS	SS	1500 Ohms	s 100E-12 F	10 N/R	3 FAILED	600 INPUT TO GND.	61	504	13
	N/R	-	Digital, Gate	Gate				רצנור		
	030 N/R	N/R	1500 Ohms	s 100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
	384 N/R	SS	1000 Ohms	s 200E · 12 F	1 N/R	1 FAILED 1 FAILED 1 FAILED	400 EACH PIN(+) 400 EACH PIN(+) 950 EACH PIN(+)	52 52 52	99 137 110	72 72 73
	028 N/R	SS	1500 Ohms	s 117E 12 F	30 N/R	5 FAILED	1000 N/R	28	252	13
	N/R	-	Digital, Gate	Gate				LSTTL		
	030 N/R	N/R	1500 Ohms	3 100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
	FSC	-	Digital, Gate	Gate				רצנור		
	426 0786 SS	SS	1500 Ohms	100E-12 F	20 N/R	3 FAILED	1000 INPUT TO GND.	61	507	13

Part Number 74LS03		Part B	ESD Class	Part <u>Descript</u> Digital,	ion Gate				Technology	<u>></u>	1
	Source 030		t Test e <u>Type</u> N/R	Test Test Test Date Type Resistance N/R N/R 1500 Ohms	Test Capacitance 100E-12 F	Number Date Number Pulses Code Devices 1 N/R	ber Test To	Number Test Devices Result Voltage Pin Combination 1 FAILED 1500 N/R	Failure Test Criteria Remai	7ks 252	General Remarks 13
	384	N/R	SS	1000 Ohms	200E-12 F	1 N/R	1 FAILED	1000 EACH PIN(+)	52	110	54
741.504		FSC	-	Digital, 1	Digital, Inverter, Buffer	٥			רצוור		
	759	068	0686 35	1500 Ohms 100E-12	100E-12 F	20 8620	3 FAILED	1000 INPUT TO GND.	19	504	13
241505		N/R	-	Digital, 1	Inverter, Buffer	۵			LSTTL		
	030	N/N	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
74LS08		X / X	-	Digital, C	Gate				רצונר		
	030	N N	N/N	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
74LS09		FSC	-	Digital, C	Gate				רצענר		
	127	X/R	SS	1000 Ohms	200E-12 F	1 N/R	1 FAILED 1 FAILED	800 INPUTS(+) GROUND(-) 1200 INPUTS(+) GROUND(-)	мм	252 252	13 13
	127	N/R	SS	1000 Ohms	200E-12 F	10 N/R	1 FAILED 1 FAILED	800 INPUTS(+) GROUND(-) 1000 INPUTS(+) GROUND(-)	MM	252	13
605772		1EX		Digital,	Gate				LSTTL		
	127	N/R	SS	1000 Ohms	200E-12 F	1 N/R	1 FAILED 1 FAILED	800 INPUTS(+) GROUND(-) 1500 INPUTS(+) GROUND(-)	2 2	252 252	51

Part <u>Mumber (Contrd)</u> 74LS09	(P.1)	Part Mfr TEX	ESO Class	Part Descripti Digital,	on Gate				Technology LSTTL	76	
	Test <u>Source</u>	ပ္မ	et Tes e Iype	Test Test Test Date Type Resistance	Test Capacitance	Number Date Number Test <u>Pulses Code Devices Resul</u>	44	Test Voltage Pin Combination	Failure Test Criteria Remarks		General
	127	N/R		1000 Ohms	230E-12 F	N/R	FAILED	400 INPUTS(+) GROUND(-) 800 INPUTS(+) GROUND(-)			13
608772		SIG	2	Digital, (Gate				רצגור		
	127	× ×	SS	1000 Ohms	200E-12 F	N/R	1 FAILED 1 PASSED	1400 INPUTS(+) GROUND(-) 1500 INPUTS(+) GROUND(-)	мм	252 252	13
	127	N/N	SS	1000 Ohms	200E-12 F	10 N/R	1 FAILED 1 PASSED	1400 INPUTS(+) GROUND(-) 1500 INPUTS(+) GROUND(-)	м м	252	13
741509		8 8		Digital, Gate	sate				רצער		
	030	N/R	×/×	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
741510		χ/χ Υ.	-	Digital, G	Gate				LSTTL		
	030	N/R	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
741510		FSC	-	Digital, Gate	ate				רצנור		
	759	0786	S SS	1500 Ohms	100E-12 F	20 N/R	3 FAILED	1000 INPUT TO GND.	61	504	13
7415107		N N	←	Digital, F	lip-flop				רצעור		
	030	N/R	N/R	N/R 1500 Ohms	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
7415109		N/R	-	Digital, F	lip-Flop				וצנור		
	030	₹	Z/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13

Part Number 74LS11	Part ESD Part Mfr Class Description N/R 1 Digital, Gate	Technology	>	1
	Test Test Test Test Number Date Number Test Test Source Date Iype Resistance Capacitance Pulses Code Devices Result Voltage Pin Combination 030 N/R N/R 1500 Ohms 100E-12 F 1 N/R 1 FAILED 1500 N/R	Failure Test Criteria Remarks 103 252		General Remarks 13
74LS11	FSC 1 Digital, Gate	72127		
	426 0786 SS 1500 Ohms 100E-12 F 20 N/R 3 FAILED 1000 INPUT TO GND.	61	504	13
7418112	N/R 1 Digital, Flip-Flop	LSTTL		
	030 N/R N/R 1500 Ohms 100E-12 F 1 N/R 1 FAILED 1500 N/R	103	252	13
	384 N/R SS 1000 Ohms 200E-12 F 1 N/R 1 FAILED 800 EACH PIN(+)	52	101	57
74LS112	FSC 1 Digital, Flip-Flop	רצנור		
	426 0686 SS 1500 Ohms 100E-12 F 20 N/R 3 FAILED 1000 INPUT TO GND.	16	507	13
741512	N/R 1 Digital, Gate	וצנור		
	030 N/R N/R 1500 Ohms 100E-12 F 1 N/R 1 FAILED 1500 N/R	103	252	13
7418123	N/R 1 Digital, Multivibrator	וצעור		
	030 N/R N/R 1500 Ohms 100E-12 F 1 N/R 1 FAILED 1500 N/R	103	252	13
7418125	N/R 1 Digital, Inverter, Buffer	וצנור		
	030 N/R N/R 1500 Ohms 100E-12 i 1 N/R 1 FAILED 1500 N/R	103	252	13

Part Number 74LS126		Part ESD Mfr Class N/R 1	Part <u>Description</u>	ion Inverter, Buffer				Technology LSTTL	A6	
	Source 030	t Test ce Date N/R	Test Tr : Type Resistance N/R 1500 Ohms	Test Capacitance 100E-12 F	Number Date Number Test Pulses Code Devices Resul 1 N/R 1 File	er Test Te ces Result Vo	Test Test Result Voltage Pin Combination FALED 1500 N/R	Failure Test Criteria Remarks 103 252		General Remarks
7415132		FSC	1 Digital,	Digital, Multivibrator				LSTTL		!
	456	0986 SS	1500 Ohms	s 100E-12 F	20 8631	3 FAILED	1000 INPUT TO GND.	19	504	13
74LS138		N/R	1 Digital, Decoder	Decoder				LSTTL		
	030	N/R N/R	1500 Ohms	s 100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
7415138		FSC 1	l Digital, D	Decoder				רצנור		
	759	SS 9890	1500 Ohms	, 100E-12 F	20 N/R	3 FAILED	1000 INPUT TO GND.	61	504	13
7415139		N/R 1	Digital, D	Decoder				LSTTL		
	030	N/R N/R	1500 Ohms	: 100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
74LS139		FSC 1	Digital, Decoder	Decoder				LSTTL		
	759	0786 SS	1500 Ohms	: 100E-12 F	20 N/R	3 FAILED	1000 INPUT TO GND.	61	204	13
741.514		N/R 1	Digital,	Digital, Inverter, Schmitt Trigger	t Trigger			LSTTL		
	030	N/R N/R	1500 Ohms	. 100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
7415148		N/R 1	Digital, Encoder	Encoder				LSTTL		
	030	N/R N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13

Part		Part ESD Mfr Clas	ESD	Part Description	٠				Technology		
741515			-	Digital, G	Gate				LSTTL	i	
	Test		Test Test Test	Test	Test	Number Date Number	Test	Test	Failure Test		General
	Sour	eη	e Type	Resistance	မွ	Pulses Code Dev	41	Voltage Pin Combination		Remarks Rem	Remarks
	030	N/R		1500 Ohms	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
7415151		X/R	-	Digital, Mu	Multiplexer				LSTTL		
	030	N/R	N/R	1500 Ohms 100E-12	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
74LS151		FSC	-	Digital, Mu	Multiplexer				רצנור		
	759	0886	0886 ss	1500 Ohms 100E-12	100E-12 F	20 N/R	3 FAILED	1000 INPUT TO GND.	61	507	13
, , , , , , , , , , , , , , , , , , ,		9							1211		
7415155		× ×	-	Digital, Me	Muitiplexer				1311		
	030	N/R	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
/240 -/2		2	-	- C					1211		
/4[5]54		ž	-		שני סקשו שני סקשו				1 : : :		
	030	N/R	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
74LS155		ν «/	-	Digital, Do	Decoder				רצעור		
	030	N/R	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
7415157		₹ /8	-	Digital, M	Multiplexer				רצנור		
	030	₹/8	N/R	1500 Ohms 100E-12 F	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
7415157		FSC	-	Digital, M	Multiplexer				LSTTL		
	759	078	0786 SS	1500 Ohms	100E-12 F	20 N/R	3 FAILED	1000 INPUT TO GND.	61	504	13

Part Number 74L\$158		Part E Mir G FSC	ESD Class	Part <u>Description</u> Digital, Multiplexer	tion , Multip	plexer						<u>></u>	ı
	Fest Source 426	Test 2 <u>e Date</u> 108 6	Test Test Test Date Type Resis 1086 SS 1500	Test Test Test Date Type Resistance 1086 SS 1500 Ohms		itance 12 F	Number Date Number Pulses Code Devices 20 8636 3			Test <u>Voltage Pin Combination</u> 1000 INPUT TO GND.	Failure Te <u>Criteria Re</u> 61	Test Ger <u>Remarks Ren</u> 204	General Remarks 13
74LS160	030	x x x x x x x x x x x x x x x x x x x	κ × π ×	1 Digital, C N/R 1500 Ohms	, Counte	ounter/Divider 100E-12 F	N/R	<u>u</u> .	1 FAILED	1500 N/R	LSTTL 103	252	13
74.5160	927	fsc	1 SS	Digital, (1500 Ohms	, Counte	Digital, Counter/Divider 1500 Ohms 100E-12 F	20 N/R	W E	3 FAILED	1000 INPUT TO GND.	18771	504	13
74LS161	030	N/R N/R	1 N/R	Digital, (1500 Ohms	, Counter/D ms 100E-12	Digital, Counter/Divider 1500 Ohms 100E-12 F	1 N/R	-	1 FAILED	1500 N/R	103	252	13
74LS161	759	FSC 1	SS	Digital, C 1500 Ohms	, Counter/D	Digital, Counter/Divider 1500 Ohms 100E-12 F	20 N/R	3 5	3 FAILED	1000 INPUT TO GNO.	LS77L 61	204	13
7415162	030	N/R N/R	1 N/R	Digital, 1 1500 Ohms	, Counter/D ^o ns 100E-12	Digital, Counter/Divider 1500 Ohms 100E-12 F	1 N/R	- 5	1 FAILED	1500 N/R	103	252	13
7415163	030	N/R N/R	N/R SS	Digital, (1500 Ohms 0 Ohms	. Counter/D ins 100E-12 ins N/R	Digital, Counter/Divider 1500 Ohms 100E-12 F 0 Ohms N/R	1 N/N N/N	1 4	1 FAILED 1 FAILED	1500 N/R 400 IN.(2)(+) GND(8)(-)	103 108	252	£ £

Part Musbon (Contid)	(i	Part ¥fr	Part ESD		Part Description						Technology	>	
7418345	S .	×/×			gital,	Counte	Digital, Counter/Divider				LSTTL		
	Test		Test Te	Test Test	st			Number Date Number	Test				General
	Source	e)	EXT and) Re	Date Type Resistance		Capacitance Pu	Pulses Code Devices	Result FAILED	Voltage Pin Combination 400 IN.(6.10)(+) GND(8)(-)	108	Remarks R	13
	Ŝ							: : -	1 FAILED	400 IN.(2,6,10)(+) GND(-)	108	252	13
	240	N/N	SS	0	Ohms		120E-12 F	1 N/R	1 FAILED	300 IN.(2,6)(+) GND(8)(-)	108	252	13
) ;	Ī							1 FAILED	100 IN.(10)(+) GND(8)(-)	108	227	13
									3 FAILED	200 IN.(10)(+) GND(8)(-)	108	227	13
	241	∝ z	ss «	0	Ohms		510E-12 F	1 N/R	2 FAILED	200 IN.(2,6,10)(+) GND(-)	108	252	13
	i	:							3 FAILED	100 IN.(10)(+) GND(8)(-)	108	526	13
	242	N/N	R SS	0	Ohms		.01E-07 F	1 N/R	1 FAILED	100 IN.(10)(+) GND(8)(-)	108	526	13
									2 FAILED	100 IN.(2,10)(+) GND(8)(-)	108	252	13
									1 FAILED	100 IN.(6,10)(+) GND(8)(-)	108	252	13
									1 FAILED	100 IN.(10)(+) GND(8)(-)	108	252	13
	243	α 2	R SS	0	Ohms		.01E-06 F	1 N/R	1 PASSED	400 IN.(2,6,10)(+) GND(-)	108	252	13
									1 FAILED	75 IN.(6,10)(+) GND(8)(-)	108	252	13
									2 FAILED	100 IN.(2,6,10)(+) GND(-)	108	252	13
7715177		0/2					Panistar Shift				LSTTL		
4C 2 104		2		5		regisar '	31116				! : !		
	030	X /R	R N/R		.00 Ohn	1500 Ohms 100E-12	E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
7415164		r SC		1 0.1	Digital,	, Regist	Register, Shift				רצעור		
	759	90	0686 35		1500 Ohms		100E-12 F	20 N/R	3 FAILED	1000 IMPUT TO GND.	61	507	13
7415165		N/N		1 0 1	Digital,	, Register,	ter, Shift				LSTTL		
	030	N/R		'R 15	ndo 00	N/R 1500 Ohms 100E-12	E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13

Morney 7.53166		Part ES	ESD Class	Part Description Digital, I	lon Register,	er, Shift				Technology LSTTL	λά	1
	Sou	Test Test Source Date	Test Iype	Test Test Iype Resistance		citance	Number Date Number Test Pulses Code Devices Resul	<u>+</u>	Test Voltage Pin Combination	failure Te Criteria Re	Test Ge Remarks Re	General Remarks
	030	N/R	x X	1500 Ohms			N/R	FAILED	1500 N/R	103		13
7418169		FSC	-	Digital,	_	Counter/Divider				רצנער		
	756	5 1086 SS	SS	1500 Ohms	s 100E-12	-12 ғ	30 N/R	3 FAILED	2000 INPUT TO GND.	61	504	13
7418173		N/R	-	Digital,	Flip-Flop	lop				רצער		
	030	N/R	N/R	1500 Ohms	s 100E-12	-12 F	1 N/R	1 FAILED	1500 N/P	103	252	13
7415174		N/R		Digital,	Flip-Flop	dol				רצענר		
	030	N/R N/R	N/R	1500 Ohms	s 100E-12	-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
7418174		FSC	-	Digital, F	Flip-Flop	do				LSTTL		
	92 ;	ss 9860 s	SS	1500 Ohms	s 100E-12	.12 F	20 N/R	3 FAILED	1000 INPUT TO GND.	19	507	13
7415175		AMD		Digital,	Flip-Flop	do				רצענר		
	127	N/R	SS	1000 Ohms	s 200E-12	-12 F	1 N/R	1 FAILED 1 FAILED	800 INPUTS(+) GROUND(-) 1000 INPUTS(+) GROUND(-)	мm	252 252	51
	127	N/R	SS	1000 Ohms	s 200E-12	.12 F	10 N/R	1 FAILED 1 FAILED	800 INPUTS(+) GROUND(-) 1000 INPUTS(+) GROUND(-)	мм	252 252	13
7418175		516	-	Digital,	Flip-Flop	d _o				רצננר		
	127	N/R	SS	1000 Ohms	s 200E-12	.12 F	1 N/R	1 FAILED	800 INPUTS(+) GROUND(-)	٣	252	13

Part Number (Cor	(Cont.d)	Part ESD Mfr Clar S1G	ESD Class	Part Description Digital, Fl	ion Flip-Flop				Technology LSTTL		1
	Test	Test	Test Test Test	Test	Test	Number Date Number Dulses Code Devices	Test	Test Voltage Pin Combination	Failure Test Criteria Remarks		General Remarks
	127	127 N/R	SS	1000 Ohms	200E - 12 F	N/R	FAILED	1400 INPUTS(+) GROUND(-)	3		13
	127	Z/Z	SS	1000 Ohms	200E-12 F	10 N/R	1 FAILED 1 FAILED	1000 INPUTS(+) GROUND(-) 1400 INPUTS(+) GROUND(-)	мм	252 252	13
7415175		FSC	-	Digital, F	Flip-Flop				רצעור		
	127	N/R	SS	1000 Ohms	200E-12 F	1 N/R	1 FAILED 1 FAILED	800 INPUTS(+) GROUND(-) 1400 INPUTS(+) GROUND(-)	мм	252 252	13
	127	N/R	SS	1000 Ohms	200E-12 F	10 N/R	1 FAILED 1 FAILED	600 INPUTS(+) GROUND(-) 1000 INPUTS(+) GROUND(-)	мм	252 252	13
	426	078	ss 9820	1500 Ohms	100E-12 F	20 N/R	3 FAILED	1000 INPUT TO GND.	19	504	13
7418175		X X	-	Digital, F	flip-Flop				LSTTL		
	030	Z/Z	2	1500 Ohms 100E-12 F	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
7418175		¥ 01	-	Digital, F	Flip-Flop				LSTTL		
	127	N/R	SS	1000 Ohms	200E-12 F	1 N/R	2 FAILED	800 INPUTS(+) GROUND(-)	m	252	13
	127	N/R	SS	1000 Ohms	200E-12 F	10 N/R	2 FAILED	1000 INPUTS(+) GROUND(-)	m	252	51
74LS181		N/R	-	Digital, A	Arithmetic, Logic Unit	igic Unit			רצנור		
	030	N/R	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
7415191		FSC	-	Digital, C	Counter/Divider	د			LSTTL		
	759	1086	SS 98	1500 Ohms	100E-12 F	10 8634	3 FAILED	600 INPUT TO GND.	61	504	13

Part	<u>a</u> ∑	Part ESD Mfr Class	Part <u>S Description</u>	.				Technology	2	
741.5192	Z	N/R	Digital,	Counter/Divider				LSTTL		1
	Test	Test Test Test		Test	Number Date Number	er Test Te	Test	Failure Te	Test Ger	General
	030	N/R N/R	1500 Ohms	Capacitance 100E-12 F	Pulses Code Devic	1 FAILED	Code Devices Result Voltage Pin Combination N/R 1 FAILED 1500 N/R	Criteria Re	Remarks Ref 252	Remarks 13
7415192	ú	FSC 1	Digital,	Counter/Divider				LSTTL		
	756	0986 SS	1500 Ohms	100E-12 F	10 N/R	3 FAILED	600 INPUT TO GND.	51	504	13
7415193	ż	N/R 1	Digital, Co	Counter/Divider				LSTTL		
	020	N/R N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
74LS193	ŭ	FSC 1	Digital, (Counter/Divider				רצעור		
	927	1086 SS	1500 Ohms	100E-12 F	10 N/R	3 FAILED	600 INPUT TO GND.	19	204	13
7418194	N/R	α		Digital, Register, Shift				LSTTL		
	030	N/R N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
7418194	FSC	ر ۲	Digital, R	egister, Shift				721257		
	927	38 9860	1500 Ohms 1	100E-12 F	20 N/R	3 FAILED	600 INPUT TO GND.	19	504	13
7415195	FSC	ر ٦	Digital, Reg	egister, Shift				רצדור		
	759	1086 SS	1500 Ohms 1	100E-12 F	20 8635	3 FAILED	1000 INPUT TO GND.	19	504	13
7415196	N/N	α	Digital, Cou	ounter/Divider				רצעור		
	030	N/R N/R	N/R N/R 1500 Ohms 1	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13

Part Number 74LS197	Part ESD Part Mfr Class Description N/R 1 Digital, Counter/Divider	Technology	
	Test Test Test Test Test Number Date Number Test Test Source Date Type Resistance Capacitance Pulses Code Devices Result Volta 030 N/R N/R 1500 Ohms 100E-12 F 1 N/R 1500 Ohms 100E-12 F 1 N/R	Test Voltage Pin Combination Criteria Remarks 1500 N/R 103 252	General ks Remarks 52 13
741.520	N/R 1 Digital, Gate 030 N/R N/R 1500 Ohn⊠ 100E-12 F 1 N/R 1 FAILED 15	LSTTL 1500 N/R 103 252	52 13
741520	FSC 1 Digital, Gate 426 0686 SS 1500 Ohms 100E-12 F 20 N/R 3 FALLED 100	LSTIL 1000 INPUT TO GND. 61 204	204 13
74,521	N/R 1 Digital, Gate - 030 N/R N/R 1500 Ohms 100E-12 F 1 N/R 1 FAILED 15	LSTTL 1500 N/R 103 255	252 13
741.5221	N/R 1 Digital, Multivibrator 030 N/R N/R 1500 Ohms 100E-12 F 1 N/R 1 FAILED 15	LSTTL 1500 N/R 103 255	252 13
7415240	SIG 1 Digital, Line/Bus Driver 127 N/R SS 1000 Ohms 200E-12 F 1 N/R 1 FAILED 8	LSTIL 800 INPUTS(+) GROUND(-) 3 255 1500 INPUTS(+) GROUND(-) 3 255	252 13 252 13
	127 N/R SS 1000 Ohms 200E-12 F 10 N/R 1 FAILED 8	800 INPUTS(+) GROUND(-) 3 255	252 13 252 13
741.5240	TEX 1 Digital, Line/Bus Driver 127 m/R SS 1000 Ohms 200E-12 F 1 m/R 1 FAILED 10	LSTTL 1000 INPUTS(+) GROUND(-) 3 25:	252 13

1	General Remarks 13	13		13 13	13		13		13		13		13		12
	7KS	252		252 252	252		504		252		204		252		252
Technology LSTIL	Failure Test Criteria Remai	мм	רצנור	мм	٣	LSTTL	61	רצוור	103	רצננר	61	LSTTL	103	רצונר	27
	Voltage Pin Combination 1500 INPUTS(+) GROUND(-)	1000 INPUTS(+) GROUND(-) 1500 INPUTS(+) GROUND(-)		1200 INPUTS(+) GROUND(-) 1400 INPUTS(+) GROUND(-)	1200 INPUTS(+) GROUND(-)		600 INPUT TO GND.		1500 N/R		600 INPUT TO GND.		1500 N/R		1000 N/R
	Test Result FAILED	1 FAILED 1 PASSED		1 FAILED 1 FAILEO	2 FAILED		3 FAILED		1 FAILED		3 FAILED		1 FAILED		15 PASSED
	Number Date Number Pulses Code Devices 1 N/R	10 N/R		1 N/R	10 N/R		10 N/R		1 N/R		10 8632		1 N/R		1 N/R
Class Description 1 Digital, Line/Bus Driver	Test Test Test Iype Resistance Capacitance SS 1000 Ohms 200E-12 F	SS 1000 Ohms 200E-12 F	2 Digital, Line/Bus Driver	SS 1000 Ohms 200E-12 F	SS 1000 Ohms 200E-12 F	1 Digital, Line/Bus Driver	SS 1500 Ohms 100E-12 F	1 Digital, Line/Bus Oriver	N/R 1500 Ohms 100E-12 F	1 Digital, Line/Bus Driver	SS 1500 Ohms 100E-12 F	1 Digital, Line/Aus Driver	N/R 1500 Ohms 100E-12 F	1 Digitat, Line/Bus Driver	GN 1500 Ohms 100E-12 F
Part B		N/R	M 01	N/N	X X	FSC	0786 ss	۳ ا	α 2	FSC	1086 SS	N/R	N/R N/R	₩ 1	N/N
(Cont'd)	Test Source 127	127		127	127		756		030		927		030		220
Part Number (Co			7415240			7415240		7415240		7415241		778377		7725772	

	General Remarks	13		13		13	54 54 54		13		13		13		13
>				504		252	139 113 111		504		252		504		252
Technology LSTTL	Failure Test Criteria Remarks	103	רצעור	61	LSTTL	103	52 52 52 52	LSTTL	61	רצער	103	רצעור	19	רצנור	103
	Test Voltage Pin Combination	1500 N/R		600 INPUT TO GND.		1500 N/R	550 EACH PIN(+) 1150 EACH PIN(+) 1100 EACH PIN(+)		2000 INPUT TO GND.		1500 N/R		600 INPUT TO GMD.		1500 N/R
	Test Result	1 FAILED		3 FAILED		1 FAILED	1 FALLED 1 FALLED 1 FAILED		3 FAILED		1 FAILED		3 FAILED		1 FAILED
	Number	-		10 N/R		1 N/R	- N/R		30 N/R		1 N/R		10 N/R		1 4/8
Part ESD Part Mfr class Description W/R 1 Digital, Transcoiver	Test Test Test Test Source Date Type Resistance Capacitance		FSC 1 Digital, Transceiver	-26 0886 SS 1500 Chms 100E-12 F	N/R 1 Digital, Multiplexer	333 4/R N/P 1500 Ohms 100E-12 F	384 N/R SS 1000 Ohms 200E-12 F	FSC 1 Digital, Multiplexer	→26 1186 SS 1500 Ohms 100E-12 F	M/R 1 Digital, Multiplexer	030 N/R N/R 1500 Ohms 100E-12 F	FSC 1 Digital, Multiplexer	426 1086 SS 1500 Ohms 100E-12 F	N/R 1 Digital, Multiplexer	32 - 4/8 4/8 15°1 Ohms 100E-12 E
Port Number 7418245			741.5245		15.25.4			7-15251		741.5253		741.5253		7525.4	

Pant Number 7415259		Part Mfr N/R	ESD Class	Part <u>Descripti</u> Digital,	Latch					97	
	Test Source 030	t Test rce Date	st Test	Test Test Test Test Source Date Type Resistance 030 N/R N/R 1500 Obms	Test <u>Capacitance</u> 1006-12 E	Number Date Number Test Pul 38 Code Devices Resu	<u>ا ا</u>	Test Voltage Pin Combination			General
7415266		ž		Digital,	Gate	£		N/K	103 STT	252	5
	030	N/R	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
741827		N/R	-	Digital,	Gate				רצוור		
	030	N/R	N/R	1500 Ohms	16JE-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
7415279		œ	-	Digital, 1	Latch				רצעור		
	030	N/R	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
74LS280		N/R	-	Digital, E	Error Detect/Correct, Parity/Carry Gen	rrect, Parity	/Carry Gen		LSTTL		
	030	N/R	x/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
7+LS283		Z/R	-	Digital,	Arithmetic, Adder, Full	er, Full			רצננר		
	030	X/R	× /×	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
7415295		χ Υ		Digital, R	Register, Shift				רצננר		
	030	X /R	N/R N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
7415298		N/R	-	Digital, L	Latch				רצוור		
	030	X/R		N/R 1500 Ohms	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13

	General Remarks	13		72		13		13		13		13		13		13
<u> </u>				141		504		252		252		504		504		504
Technology	Failure Test Critería Remarks	19	וצנגר	52	LSTTL	61	רצננר	103	רצעור	103	רצבור	19	וצנור	61	רצעור	01
	Oate Number Test Test Code Devices Recult Voltage Pin Combination	2000 INPUT TO GND.		600 EACH PIN(+)		1000 INPUT TO GND.		1500 N/R		1500 N/R		1000 INPUT TO GND.		1000 INPUT TO GND.		1000 INPUT TO GND.
	umber Test To	3 FAILED		1 FAILED		3 FAILED		1 FAILED		1 FAILED		3 FAILED		3 FAILED		3 FAILED
	Number Date Number Dukses Code Devises	30 N/R		1 N/R		20 N/R		1 N/R		1 N/R		20 N/R		20 8633		20 8514
Part Description Digital, Latch	Test		Digital, Register, Shift	1000 Ohms 200E-12 F	Digital, Register, Shift	1500 Ohms 100E-12 F	Digital, Gate	1500 Ohms 100E-12 F	Digital, Gate	1500 Ohms 100E-12 F	Digital, Gate	1500 Ohms 100E-12 f	Digital, Register, Shift	1500 Ohms 100E-12 F	Digital, Multiplexer	1500 Ohms 100E-12 F
Part ESD Mfr Class FSC 1	Test Test Test	0786 SS	N/R	N/R SS	FSC 1	0786 55	N/R 1	N/R N/R	N/R 1	N/R N/R	FSC 1	078 6 SS	FSC 1	1086 SS	FSC 1	SS 9860
(Cont'd)	rest	750	•	384		756	-	030	~	030	-	756		759		426
Part Number (C 74LS298			7-15299		741.5299		741530		741.532		741532		7415323		741.5352	

Part Number 7+LS353		Part ESD Mfr Cla	ESD Class	Part <u>Description</u> Digital, Mul	non Multiplexer					76	1
	Fest Sour 030	Fest Fest Source Date 030 N/R	t Test e Type N/R	Test Test Type Resistance N/R 1500 Ohms	Test <u>Capacitance</u> 100E-12 F	Number Date Number Test Pulses Code Devices Resu	nber Test T rices Result V 1 FAILED	Date Number Test Test <u>Code Devices</u> Result Voltage Pin Combination N/R 1 FAILED 1500 N/R	Failure Test Criteria Remarks 103 252	Test Ge Remarks Rei 252	General Rerarks
7415353	927	ŭ.	sc 1 1086 SS	Digital,	Digital, Multiplexer 1500 Ohms 100E-12 F	20 N/R	3 FAILED	1000 INPUT TO GND.	LSTTL 61	204	13
7415365	759	S	c 1 0886 SS	Digital,	Inverter, Buffer s 100E-12 F	10 8623	3 FAILED	600 INPUT TO GND.	רצדונ 61	507	13
7415366	759	FSC 0886 SS	ss s	Digital, 1500 Ohms	Inverter, Buffer s 100E-12 F	10 8614	3 FAILED	600 INPUT TO GND.	LSTTL 61	204	13
741.5367	030	N/R N/R		1 Digital, N/R 1500 Ohms	Line/Bus Driver s 100E-12 F	1 N/R	1 FAILED	1500 N/R	LSTTL 103	252	13
741.5368	030	N/R N/R	× × ×	Digital, 1500 Onms	Inverter, Buffer 3 100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
741537	030	N/R N/R	× × ×	Digital, 1500 Ohms	Inverter, Buffer ; 100E-12 F	1 N/R	1 FAILED	1500 N/R	LSTTL 103	252	13
7415373	030	N/R N/R		1 Digital, I N/R 1500 Ohms	Latch : 100E-12 F	1 N/R	1 FAILED	1500 N/R	LSTTL 103	252	13

	-	Remarks	13		5		13		13		13		13		13		13
		st narks Ren	504		252		504		504		252		252		252		504
Technology	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	raiture iest Criteria Remarks	61	TSILF	103	LSTTL	61	LSTTL	61	רצענר	103	רצעור	103	רצעור	103	וצנור	61
		Test Voltage Pin Combination	1000 INPUT TO GND.		1500 N/R		AND INPUT TO GND.		1000 INPUT TO GND.		1500 N/R		1500 N/R		1500 N/R		600 INPUT TO GND.
		Number Date Number Test Te Pulses Code Devices Result Vo	3 FAILED		1 FAILED		3 FAILED		3 FAILED		1 FAILED		1 FAILED		1 FAILED		3 FAILED
	,	Number Date P Pulses Code [20 N/R		1 N/R		10 N/R		20 8613		1 N/R		1 N/R		1 N/R		10 8449
	tai, Laton	Test Test Desistance Capacitance	1500 Ohms 100E-12 F	Digital, Flip-Flop	N/R 1500 Ohms 100E-12 F	Digital, Flip-Flop	1500 Ohms 100E-12 F	Digital, Flip-Flop	1500 Ohms 100E-12 F	Digital, Inverter, Buffer	1500 Ohms 100E-12 F	Digital, Counter/Divider	1500 Ohms 100E-12 F	Digital, Counter/Divider	1500 Ohms 100E-12 F	Digital, Register, Shift	1500 Ohms 100E-12 F
Part ESD Mfr Class	'n	Test Test Test	3	N/R 1	x 2	FSC 1	SS 9860	FSC 1	1086 SS	N/R 1	N/R N/R	N/R	N/R N/R	N/R	N/R N/R	FSC 1	0886 SS
(Cont'd)		Test	456		030		426		759		030		030		030		426
	7415573			7415374		7418374		741 5379		74LS38		7415390		7415393		5628772	

Part Number		Part	ESD		UO.				, and load to I	ì	
241.840		X X			Digital, Inverter, Buffer	er.			1811	X	1
	Tes	lest les	st Tes	Test Test Test	fest	Number Date Number Test	mber Test T	Test	failure Test	est Ge	General
	030	N/F	te Type R N/R	Mesistance 1500 Ohms	capacitance (oulses Code De	vices Result V	Source Date Type Resistance Capacitance Pulses Code Devices Result Voltage Pin Combination 030 N/R N/R 1500 Ohms 100E-12 F 1 N/R 1 FAILED 1500 N/R	Criteria Remarks 103 252	emarks Re 252	Remarks 13
241.540		FSC	-	Digital,	Digital, Inverter, Buffer	Ļ			רצענר		
	977		0786 SS	1500 Ohms	Ohms 100E-12 F	20 N/R	3 FAILED	1000 INPUT TO GND.	19	504	13
275172		N/R	-	Digital, Encoder	Encoder				רצנור		
	030	N/R	N/R	1500	Ohms 100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
741851		x 'x	-	Digital, Gate	Gate				LSTTL		
	030	N/R		N/R 1500 Ohms 100E-12	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
741.554		N/R	*	Digital, Gate	sate				רצוור		
	030	N/R	N/R	1500	Ohms 100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
7418574		FSC	-	Digital, Flip-Flop	:lip-Flop				LSTTL		
	756		0886 SS	1500 Ohms 100E-12	100E-12 F	20 8626	3 FAILED	1000 INPUT TO GND.	61	507	13
2418670		N/R	-		Digital, Register, File				LSTTL		
	030	N/R	N/R	N/R 1500 Ohms 100E-12	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
741874		æ/w	-	Digital, Flip-Flop	:lip-flop				LSTTL		
	030	N/R	N N	1500 Ohms 100E-12	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13

Part Number (0 74LS74	(Cont'd)	Part ESD Mfr Clas	ESD Class	Part <u>Description</u> Digital, Fl	ion Flip-Flop				Technology LSTTL		1
	Test Source	ابو	Test Test Test Date Type Resi		Test Capacitance	4. 4.1	Test Result	Voltage Pin Combination	Failure Test iteria Remai	Test General Remarks Remarks	arks
	387	N/R	SS	1000 Ohms	200E-12 F	× / × / × / × / × / × / × / × / × / × /	1 FAILED	900 EACH PIN(+)	ر م ر	112	7.
							1 FAILED 1 FAILED	1200 EACH PIN(+) 3700 EACH PIN(+)	رر 8	114	7,7
741.875		Z/R	-	Digital, L	Latch				LSTTL		
	030	N/R	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
241586		N/N	-	Digital, G	Gate				רצנור		
	030	N/R	N/R	1500 Ohms 100E-12	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
741586		FSC	-	Digital, G	Gate				LSTTL		
	426		0886 ss	1500 Ohms 100E-12	100E-12 F	20 N/R	3 FAILED	1000 INPUT TO GND.	61	504	13
265172		¥/8	-	Digital, C	Counter/Divider	<u>.</u>			LSTTL		
	020	N/R	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1500 N/R	103	252	13
24800		7EX	-	Digital, (Gate				STTL		
	620	N/R	R/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	2144 N/R	102	188	13
	500		1175 SS	0 Ohms	100E-12 F	1 N/R	1 FAILED	250 INPUT(+) PR. SUPPLY(-)	102	252	13
7450		FSC	-	Digital,	Gate				STTL		
	927		ss 9860	1500 Ohms	1500 Ohms 100E-12 F	20 N/R	3 FAILED	1000 INPUT TO GND.	61	504	13

Part Number (Cont'd) 74S00	Part Mfr N/R	ESD Class 1	Part <u>Description</u> Digital, Gal	ion Gate				Technotogy STTL	λ6	
3 K	Source Date 030 N/R		Test Test Type Resistance N/R 1500 Ohms	Test <u>ce Capacitance</u> s 100E-12 F	Numbe. Date Nu Pulses Code De 1 N/R	Date Number Test T Code Devices Result V N/R T FAILED	Test Voltage Pin Combination 1000 N/R	Failure Test Criteria Remarks 103 252		General Remarks 13
90	067 N/R	N/N	0 Ohms	N/R	1 N/R	1 FAILED	375 INPUT	102	252	٥
90	068 N/R	X/X	0 Ohms	100E-12 F	1 N/R	1 FAILED	250 INPUT	102	252	٥
690	59 N/R	N/R	0 Ohms	150E-12 F	1 N/R	1 FAILED	200 INPUT	102	252	٥
070	70 N/R	N/R	0 Ohms	. 200E-12 F	1 N/R	1 FAILED	175 INPUT	102	252	٥
384	ZZ N/R	SS	1000 Ohms	. 200E-12 F	1 N/R	1 FAILED 1 FAILED 1 FAILED	800 EACH PIN(+) 650 EACH PIN(+) 850 EACH PIN(+) 650 EACH PIN(+)	52 52 52 52 52	105 141 101 138	54 54 54
028	8 N/R	SS	1500 Ohms	. 117E-12 F	30 N/R	S FAILED	1000 N/R	98	252	13
74502	N/R	-	Digital,	Gate				STTL		
030	.0 N/R	X X	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13
	FSC	-	[jgital,	Gate				STTL		
927	6 0786	ss s	1500 Ohms	100E-12 F	20 N/R	3 FAILED	1000 INPUT TO GND.	61	504	13
	N/R	-	Digital,	Gate				STTL		
030	0 N/R	X X	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13
	N/R		Digital,	Inverter, Buffer	۵			STTL		
030	0 N/R	N/R	1500 Ohms	,00E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13

1118 	Result Voltage Pin Combination Criteria Remarks Remarks 3 FAILED 2000 INPUT TO GND. 61 204 13	STTL 1 FAILED 1000 N/R 103 252 13	STTL 1 FAILED 1000 N/R 103 252 13	STTL 1 FAILED 1000 N/R 103 252 13	STTL 3 FAILED 2000 INPUT TO GND. 61 204 13	STTL 3 FAILED 2000 IMPUT TO GND. 61 204 13	STTL 1 FAILED 1000 N/R 103 252 13	STTL
Part <u>Description</u> Digital, Inverter, Buffer	t Test Number Date Number Test <u>Resistance Capacitance Pulses Code Devices Results 1500 Ohms 100E-12 F 30 N/R 3 FALL</u>	Digital, Inverter, Buffer 1500 Ohms 100E-12 F 1 N/R	Digital, Gate 1500 Ohms 100E-12 F 1 N/R	Digital, Gate 1500 Ohms 100E-12 F 'N/R	Digital, Gate 1>00 Ohms 100E-12 F 30 N/R	Digital, Flip-flop 1500 Ohms 100E-12 F 30 N/R	Digital, Gate 1500 Ohms 100E-12 F	l Digital, Gate
Number (Cont'd) Mfr Class	Test Test Test Test Source Date Type Resis	74S05 N/R 1	74S08 N/R 1 030 N/R N/R	74510 N/R 1 030 N/R N/R	74S10 FSC 1 426 0786 SS	74S109 FSC 1 426 1086 SS	74511 N/R 1 030 N/R N/R	74S11 FSC 1

Part	ļ	Part ESD	Part <u>Cesc</u> nipt	100						
748112			Digital,	flip-flap	!					
	les Sou	lest lest Te Source Date Iv	Test Test Test Date Ivne Registance	Test	Number Date Number Test Balear Code Datases Balle		lest	failure T		Leneral
	030	3]	R 1500 Ohms	100E - 12 F	1 N/R	N/R 1 FAILED	1000 N/R			Remarks 13
745112		FSC	1 Digital,	Flip-flop				1118		
	426	0686 55	1500 Ohms	: 100E-12 F	20 N/R	3 FAILLO	100. INPUT 10 GND.	61	204	ŭ
745133		N/R	1 Digital,	Gate				STTL		
	030	N/R N/R	R 1500 Ohms	. 100E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13
748135		N/8	1 Digital,	Gate				SITL		
	030	N/R N/R	R 1500 Ohms	100E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13
745138		FSC 1	1 Digital, I	Decoder				STTL		
	759	0686 SS	1500 Ohms	100E-12 F	30 N/R	3 FAILED	2000 INPUT TO GND.	61	504	13
745139		FSC 1	1 Digital, E	Decoder				STTL		
	759	1086 SS	1500 Ohms	100E-12 F	30 N/R	3 FAILED	2000 INPUT TO GND.	61	504	13
745140		N/R 1	1 Digital, I	Line/Bus Drīver				STTL		
	030		N/R N/R 1500 Ohms	100E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13
745151		N/R	Digital,	Multiplexer				STTL		
	030	N/R N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1000 N/R	103	2-2	13

Part Number 74S151	(Cont'd)	Part ESD Mfr Class FSC 1	Part Descrip Digital	tion , Multiplexer				Technology STTL	,	1
	Test Source 426	Test Test Test ce Date Type Resis 0686 SS 1500	Test Test Test Test Source Date Type Resistance 426 0686 SS 1500 Ohms	Test <u>Capacitance</u> 100E-12 F	Number Date Number Pulses Code Devices 20 N/R 3		Test Test Result Voltage Pin Combination FAILED 1000 INPUT TO GND.	Failure Test Criteria Rema	204 204	General Remarks 13
74\$153	U\$U	N/R 7		Digital, Multiplexer 1500 Ohms 100F-12 F	2	FAILED	8/N 000 t	STTL 103	252	13
748153	967	٠,				3 FATIED	2000 INPUT TO GND	STTL 61	507	<u>. 5</u>
745157		N/R	Digital	, Multiplexer				STTL		:
748157	030	N/R N/R	1500 Ohms Digital,	; 100E-12 F Multiplexer	N/R	1 FAILED	1000 N/R	10 3 STTL	252	13
2.0.7	759	0786 55	É	1006-12	8/2 Pr - 5/2	77	CONS. CLASS. 15 GND.		502	۴
0000	426	1086 SS	1500 Ohms 100E-12	muttiblexer ; 100E-12 F	20 N/R	3 FAILED	1030 INFUT TO GND.	7	504	13
74\$160	030	N/R N, R		Digital, Courte-/Divider '500 Ohms 100E-12 F	8'/7 ·	1 FALLED	e/N uco.	S77L 103	252	13
745151	030	N/R N/R N/R	Digital, 1500 Ohms	Counter/Divider ; 100E-12 F		1 FAILED	1000 N/R	ST1L 10 3	252	13

Pant Number 745174		Part B	ESO Class	Part <u>Description</u> Digital, Fli	ion Flip-Flup	Flop				<u>Technology</u> STTL	Z6	1
	Test		t Test	Test Test Test			Date	. Test Te		Failure Te		General
	030	N/R 1	3 × /×	1500 Ohms		Lapac tance P 100E-12 F	Pulses Code Devices 1 N/R 1	es Result Vo	Result Voltage Pin Combination FAILED 1000 N/R	Criteria Remarks 103 252		Remarks 13
748175		N/R	-	Digital,	Flip-Flop	Flop				STTL		
	030	α 2	α ×	1330 Ohms 1005-12	s 100	Ē-, 2 F	' N/R	1 FAILED	1000 N/R	103	252	13
748175		FSC	-	Digital,	Flip-Flop	Flop				STTL		
	756	0786	SS	1500 Ohms		100E-12 F	20 N/R	3 FAILED	1000 INPUT TO GND.	61	507	13
74S181		N/R	•	Digital,	Arith	Arithmetic, Logic Unit	ic Unit			STTL		
	030	N/R	N/R	1500 Ohms 100E-12	100.	E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13
745182		% / &	-	Digital,	Arith	metic, Carı	Arithmetic, Carry Generator			STTL		
	030	N/R	N/R	1500 Ohms		100E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13
745189		N/R	-	Digital,	Метог	Memory, RAM, Static	atic			STTL		
	030	N/R	N/R	1500 Ohms		100E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13
74520		₹	-	Digital,	Gate					STTL		
	030	N/R	N/R	1500 Ohms		100E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13
74520		FSC	-	Digital,	Gate					STTL		
	927	0686 SS	SS	1500 Ohms		100E-12 F	30 N/R	3 FAILED	2000 INPUT TO GND.	19	26.	13

9.3P.¢	Part	esp Class	Part Resentation	S				Jechnorada	,	
00284.	N/R		Digital,	Memory, RAM				STTL		l !
	Source Da	Test Test Test Date Type Resi	Test Test Test Source Date Type Resistance	Test Capacita	C) C)	Test Result	Test		<u>\$</u>	General Remarks
	Y/W 0.00	Y Z	SW40 00C)	100E-12 F	Y Z	. FAILED	1000 V/X	S fire	<i>3</i> C	2
74822	œ Z	••	Digital,	Gate				STTL		
	030 N/R	α 2	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13
748251	N/R	-	Digital, 4	Multiplexer				STTL		
	030 N/R	χ χ	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	5
745257	N/8	-	Digital, P	Multiplexer				STIL		
	030 N/R	α 2	1530 Ohms	100E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13
748257	FSC	-	Digital, P	Multiplexer				STTL		
	425 1ņ	1086 SS	1560 Ohms	100E-12 F	20 N/R	3 FAILED	1000 INPUT TO GND.	61	504	13
74.5258	a z	-	Digital, P	Multiplexer				STTL		
	030 N/R	α/χ α	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13
745258	FSC	•	Dígital, I	Multiplexer				STTL		
	426 10	1086 SS	1500 Ohms	100E-12 F	30 N/R	3 FAILED	2000 IMPUT TO GMD.	61	504	13
74537	N/N	-	Digital,	Gate				STTL		
	030 N/R	α/x α	1506 Ohms	100€-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13

7.351 Vorber 7.832		Fort 8	8.80 Class	Part Description Digital, Gate	ion Gate				Technology	>	ı
	Test <u>Source</u> 030	3)	t řest <u>e Iype</u> N/R	Test Test Test Date Type Resistance N/R N/R 1500 Ohms	Test ce Capacitance s 100E-12 F	Number Date Pulses Code	Test Result FAILED	Voltage Pin Combination 1000 N/R	Failure Te Criteria Re 103	Test Gen Remarks Rem 252	General <u>Remarks</u> 13
74832	-26	S.	.c 1 0786 SS	Digital, Gate 1500 Ohms 100	Gate s 100E-12 F	30 N/R	3 FAILED	2000 INPUT TO GND.	STTL 61	204	13
0+8+6	426	FSC 0786	5 \$\$	Digital, I 1500 Chms	Inverter, Buffer s 100E-12 F	fer 20 N/R	3 FAILED	1000 INPUT TO GND.	STTL 61	504	13
C) #9#	S C C C C C C C C C C C C C C C C C C C	χ α χ α/α	~ @ Z	Digital, 1 1500 Ohms	Digital, Memory, PRUM 1500 Ohms - 100E-12 E	1 N/R	1 FAILED	1000 N/R	STTL 103	252	5
. 55-:	030	8/2 8/2	· α Ž	Digital, Gato 1500 Ohms 100	Gatr s 100E-12 F	I N/R	1 FAILED	1000 N/R	STTL 103	252	13
4574	030	8/8 8/8	N/R	Digital,	Digital, Flip-Flob 1500 Ohms 100E-12 F	N/R	1 FAILED	1000 N/R	STTL 103	252	13
7,535)30	α z	× 8/	01gital, 7	Digital, Arithmetic, Magnitude Comparator 1500 Ohms 100E-12 F 1 N/R	ignitude Compan 1 N/R	ator 1 FALLED	1000 N/R	STTL 103	252	13
745.86	, ,	a/2	÷ ×	Digital, Gate 1500 Chms 100	Gate s 100E-12 F	1 N/R	1 FAILED	1000 N/P	STTL 103	252	13

1	General Remarks 13	13		<u> </u>		<u> </u>		13 13 13
	ks 204	188		180 179 86 80 178 181		94 176 93 173 182 175		£ £ £
Technology STTL	Failure Test Criteria Remar	דד <u>ר</u> 102	CMOS	104 104 104 104 104	CMOS	104 104 104 104 104	CMOS	104 104 104
	Voltage Pin Combination 2000 INPUT TO GND,	4907 N/R		500 INPUT(4)(+) VSS(3)(-) 500 INPUT(4)(+) VSS(3)(-) 500 INPUT(4)(+) VDD(14)(-) 800 INPUT(4)(+) VSS(3)(-) 500 INPUT(4)(+) VSS(3)(-) 500 INPUT(4)(+) VSS(3)(-)		800 RREF(15)(+) VSS(3)(-) 500 INPUT(8)(+) VDD(14)(-) 500 RFB(16)(+) VDD(14)(-) 800 INPUT(4)(-) VSS(3)(-) 500 RFB(16)(+) VSS(3)(-)		800 INPUT(+) VSS(-) 800 INPUT(4)(+) VSS(3)(-) 500 INPUT(9)(+) VSS(3)(-)
	Test Result FAILED	1 FAILED		1 FAILED 1 FAILED 1 FAILED 1 FAILED 1 FAILED 1 FAILED		1 FAILED 1 FAILED 1 FAILED 1 FAILED 1 FAILED 1 FAILED		1 FAILED 1 FAILED 1 FAILED
	Number Date Pulses Code 30 N/R	ver 1 N/R	1-D/A	α 2	0-D/A	1 N N N N N N N N N N N N N N N N N N N	D-D/A	1 N/R
Part <u>Description</u> Digital, Gate	Test Test Resistance Capacitance 1500 Ohms 100E-12 F	3 Digital, Line/Bus Receiver N/R 1500 Ohms 100E-12 F	Digital, Converter, A/D-D/A	1500 Ohms 100E-12 F	Digital, Converter, A/D-D/A	1500 Ohms 100E-12 F	Digital, Converter, A/D-D/A	1500 Ohms 100E-12 F
Part ESD Mfr Class FSC 1	Test Test Test Test Source Date Type Resistance 426 0886 SS 1500 Ohms	TEX 3	ANA 1	ss 0860	181 1	ss 0860	A 11	SS 0860
(Cont'd)	Source 426	620		900		500		500
Part Number 74586		75107	7520		7520		7520	

1	General Remarks 13 13 13	13 13		£1 £1 £1 £1		ស ស ស ស ស		13
A A	Remarks R 82 84 87	252 252 252		264 265 177 91 252 90		88 267 92 252 252		252
Technology	Failure Te Criteria Re 104 104 104	CMOS 103 103	CMOS	104 104 104 104 104	CMOS	104 104 104 104 104	CMOS	103
	Voltage Pin Combination 800 INPUT(4)(+) VSS(3)(-) 500 INPUT(9)(+) VSS(3)(-) 800 INPUT(6)(+) VSS(3)(-)	1000 N/R 1000 N/R 1000 N/R		800 INPUT(6)(+) VSS(-) 800 INPUT(6)(+) VSS(-) 800 INPUT(6)(+) VDD(-) 800 RFB(18)(+) OUTPUT(-) 800 INPUT(7)(+) OUTPUT(-)		500 RFB(818)(+) VSS(-) 500 INPUT(7)(+) VSS(-) 500 RREF(17)(+) VSS(-) 500 RFB(18)(+) VSS(-) 500 RREF(17)(+) VSS(-)		1000 N/R
	Test Result FAILED FAILED FAILED	1 FAILED 1 FAILED 1 FAILED		1 FAILED 1 FAILED 1 FAILED 1 FAILED 1 FAILED 1 FAILED		1 FALLED 1 FALLED 1 FALLED 1 FALLED 1 FALLED		1 FAILED
D-D/A	Number Date Pulses Code 1 N/R	D-D/A 1 N/R	D-D/A	- N	0-D/A	L 8/)-D/A	1 N/R
ion Converter, A/D-D/A	Test <u>Capacitance</u> 100E-12 F	Converter, A/D-D/A 100E∴12 F	Converter, A/D-D/A	100E - 12 F	Converter, A/D-D/A	100E-12 F	Converter, A/D-D/A	100E-12 F
Part <u>Descripti</u> Digital, I	Test Resistance 1500 Ohms	Digital, (1500 Ohms	Digital, (1500 Оhms	Digital, C	1500 Ohms	Digital, C	1500 Ohms
ESD Class	Test Test Test Date IYPE Resis 0980 SS 1500	N/R	-	SS 0860	-		1 0	N/R
Part MIT	81	N/R N/R	NSC	0860	RAY	ss 0860	N/R	N/R
(Cont'd)	Test Source 005	030		000		500		030
Part Number 7520		7520	7521		7521		7521	

Part	Part	Part ESD Mfr Class	Part Descript	noi				Technology		1
7522	N/R	}	1 Digital,	Converter, A/D-D/A	.D/A			CMOS		
	Test Te	Test Test	st Test	Test	Number Date Number	Test		Failure Test	st Ge	General
	9)	ate IV	De Resistan	Capaci tance		Result	Voltage Pin Combination			Remarks
	030 N/	N/R N/R	R 1500 Ohms	s 100E-12 F	1 N/R	1 FAILED	1000 N/R	103	707	2 !
						1 FAILED	1000 N/R	103	555	13
7533	ANA		1 Digital,	Converter, A/D-D/A	-D/A			CMOS		
	900 900	SS 0860	1500 Ohms	s 100E-12 F	1 N/R	1 FAILED	1000 INPUT(4)(+) VDD(14)(-)	104	252	13
						1 FAILED	1000 INPUT(7)(+) VDD(14)(-)	104	252	<u>.</u>
						1 PASSED	1000 N/R	104	757	51 21
						1 FAILED	800 INPUT(10)(+) UUIPUT(-)	104	3.5	<u>.</u> .
						1 FAILED	1000 INPUT(4)(+) VSS(-)	104	85	13.
75461	N/R		2 Digital,	Line/Bus Driver	£_			111		
	030 N,	N/R N/R	R 1500 Ohms	s 100E-12 F	1 N/R	1 FAILED	3000 N/R	103	252	13
75462	N/R		2 Digital,	Line/Bus Oriver	Ĺ			TTL		
	030 N	N/R N/R	R 1500 Ohms	is 100E-12 F	1 N/R	1 FAILED	3000 N/R	103	252	13
75463	N/R		2 Digital,	Line/Bus Dríver	د			111		
	030 N	N/R N/R	R 1500 Ohms	s 100E-12 F	1 N/R	1 FAILED	3000 N/R	103	252	13
75464	N/R		2 Digital,	Line/Bus Driver	L			TTL		
	030 N	N/R N/	N/R 1500 Ohn	1500 Ohms 100E-12 F	1 N/R	1 FAILED	3000 N/R	103	252	13
7552	1SL		1 Digital,	Memory, RAM, Static	itatic			MOS		
	003	1175 SS	0	Ohms 100E-12 F	1 N/R	1 FAILED	400 INPUT(+) PR. SUPPLY(-)	102	252	13

Part Number		Part Mfr	ESD Class	Part Description	ç				Technology	>	
751.585			-	Digital,	rithmetic, Mag	Arithmetic, Magnitude Comparator	ator		LSTTL		}
	Test		Test Test Test Date Type Resis	Test Test Test Date Type Resistance	Test Capacitance	Number Date Number Pulses Code Devices	Test Result	Test Voltage Pin Combination	Failure Test <u>Criteria</u> Remar	ķ	Genera! Remarks
	030		R N/R	1500 Ohms	100E-12 F	1 N/R			103	252	13
76.161		HAR	-	Digital, M	Memory, PROM				STTL		
	392		1086 SS	1500 Ohms	100E-12 F	1 N/R	5 FAILED	1050 EACH PIN TO 12 & 24 (+ -)	19	252	13
76161		N/R	2	Digital,	Memory, PROM				STTL		
	030	N/R	R/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	3000 N/R	103	252	13
7620		N/R	m	Digital, M	Memory, PROM				STTL		
	542	N/R	SS ~	100 Ohms	N/R	1 N/R	15 FAILED	83 INPUT(+) GND(-)	25	186	21
76321		HAR	-	Digital, Me	Memory, PROM				STTL		
	392		0886 ss	1500 Ohms	100E-12 F	1 N/R	3 FAILED	1000 EACH PIN TO GND, VCC (+ -)	19	252	13
776		FSC	M		Linear, Operational Amplifier	ifier			Bipolar		
	620	N/R	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	5932 N/R	102	188	13
776		N/R	2	Linear, Op	Linear, Operational Amplifier	ifier			Bipolar		
	030	N/N	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	2500 N/R	103	252	13
7805		N/R	ĸ	Linear, Vol	Linear, Voltage Regulator	ر			Bipolar		
	030	X X		N/R 1500 Ohms	100E-~2 F	N/R	1 FAILED	10000 N/R	103	252	13

Part		Part ESD Mfr Clas		Part Descript	ion				Technology		1
7812		FSC	2	Linear,	Voltage Regulator				Bipolar		
	Test	Tes	t Tes	Test Test Test	Test	Date	Test	Test Valence Die Combination	Failure Test General	it Ge	General Remarks
	Sour 390	ce Date	SI SI	Source Date Type Resistance 390 N/R GN 1500 Ohms	Capacitance Pulses 100E-12 F 5	ses Code Devices 5 N/R 1	PASSED	2000 S/R	105	247	11
7812		χ «/	ω	Linear,	Voltage Regulator				Bipolar		
	030	N/R	N/R	N/R 1500 Ohms	100E-12 F	1 N/R	1 FAILED 1 FAILED 1 FAILED	10000 N/R 10000 N/R 10000 N/R	103 103 103	252 252 252	13 13
7815		N/R	2	Linear,	Voltage Regulator				Bipolar		
	030	×/8	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	10000 N/R	103	252	13
78405		N/R	M	Linear,	Voltage Regulator				Bipolar	.•	
	030	X X	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	10000 N/R	103	252	13
78M05		FSC	2	2 Linear, Vo	Voltage Regulator				Bipolar		
	390	N/R		GN 1500 Ohms 100E-12	100E-12 F	5 N/R	1 PASSED	2000 S/R	105	242	11
78M05		N/R	3	3 Linear, Vo	Voltage Regulator				Bipolar		
	030	N/R		N/R 1500 Ohms	100E-12 F	1 N/R	1 FAILED	10000 N/R	103	252	13
78M12		FSC	2	2 Linear, Vo	Voltage Regulator				Bipolar		
	390	N/R	N S	1500 Ohms	100E-12 F	S N/R	1 PASSED	2000 S/R	105	242	Ξ

Part Number (78M12	(Cout'd)	Part B	ESD Class 3	Part <u>Description</u> Linear, Voltage Regulator	Regulator				Technology Bipolar		ļ
	Test Source	Test ce Date	Test Test Test Date Type Resis N/R N/R 1500	Test Test Test Test Source Date Type Resistance Capacitan 030 N/R N/R 1500 Ohms 100E-12 F	Test Number Capacitance Pulses	Date Number Code Device		Test Test Result Voltige Pin Combination Enter Announce	Failure Test Criteria Remar	s s	General Remarks
78M15	3	ž		7	Regulator			X/N (2000)	ius Bipolar	767	<u>s</u>
7905	030	N/R	N/R	1500 Ohms 100E-12		1 N/R	1 FAILED	10000 N/R	103	252	13
	030	X X X X X X X X X X X X X X X X X X X	N/R	Linear, voltage kegulator 1500 Ohms 100E-12 F		1 N/R	1 FAILED 1 FAILED	10000 N/R 10000 N/R	Bipolar 103 103	252 252	13
7912		N/R	M	Linear, Voltage Regulator	Regulator				Bipolar		
	030	N/R	N/R	1500 Ohms 100E-12	u.	1 N/R	1 FAILED 1 FAILED	10000 N/R 10000 N/R	103	252 252	13
7915		N/R	М	Linear, Voltage Regulator	egulator				Bipolar		
	030	N/R	X X	1500 Ohms 100E-12	L L	1 N/R	1 FAILED 1 FAILED	10000 N/R 10000 N/R	103 103	252	13
7654		N/R	٣	Linear, Voltage R	tage Regu{ator				Bipolar		
	030	N/R	N/R	1500 Ohms 100E-12	LL.	1 N/R	1 FAILED	10000 N/R	103	252	13
79 m 12		FSC	2	Linear, Voltage R	tage Regulator				Bipolar		
	390	N/R	S.	1500 Ohms 100E-12	u_	5 N/R 1	1 PASSED	2000 S/R	105	247	=

Part Number (Cont'd) 79M12	(6),1	Part E	ESD Class	Part <u>Description</u> Linear, Voltage Regulator	ator			Technology Bipolar		
	Test Source 030	Test ce Date N/R	Test Test <u>Date Type</u> N/R N/R	Test Test Test Test Test Date Type Resistance Capacitance N/R N/R 1500 Ohms 100E-12 F	Number Date Number Test Pulses Code Devices Result 1 N/R 1 FAILE	umber Test Ta	Test Test Result Voltage Pin Combination FAILED 10000 N/R	Failure Test Criteria Remai	7ks 252	General Remarks 13
79M15	300	FSC	~ 3	Linear, Voltage Regulator	ator 5 w/R	1 PASSED	2000 S/R	Bipolar 105	247	=
79M15	0	ž ž	K	locale				Bipolar		
	030	N/N	N/R	1500 Ohms 100E-12 F	1 N/R	1 FAILED	10000 N/R	103	252	13
7M853S65		101	₩	Digital, Memory, RAM, Static	Static			CMOS		
	436	1186 SS	SS S	1500 Ohms 100E-12 F	18 N/R	2 PASSED	4000 INPUT TO GND	~	252	8
80186		TN 1	- -	Digital, Processing L	Processing Unit, Central			NWOS		
	459	N/R	Š	0 Ohms 50E-12 F	3 N/R	10 PASSED	600 N/R	13	237	13
	428	N/R	Š	1500 Ohms 100E-12 F	5 N/R	10 PASSED 10 PASSED	1200 N/R 1200 N/R	13	252 252	13 13
	627	X/R	Š	0 Ohms 50E-12 F	3 N/R	10 PASSED	600 N/R	13	237	13
80188		INI	-	Digital, Processing Unit,	Jnit, Central			HMOS		
	428	N/R	હ	1500 Ohms 100E-12 F	5 N/R	10 PASSED 10 PASSED	1200 N/R 1200 N/R	13	252	13
	625	N/R	Š	0 Ohms 50E-12 F	3 N/R	10 PASSED	600 N/R	13	237	13

Part Number 30236		Part Mfr INT	ESD Class		Part <u>Description</u> Digital, Processing Unit, Central	Central			Technology HMOS	7	
					'A mo fameroa	בבוורו מו			SOE		
	Test	Tes	t Tes	Test Test Test	Test	Date	Test	Test			General
	677	7/1	n/r GN	0 Ohms	SOE-12 F	Fulses Lode Devices 3 N/R 10	FASSED	Voltage Pin Combination 600 N/R	Criteria Re	Remarks Ren 237	Remarks 13
	758	N/R	S.	1500 Ohms	100E-12 F	5 N/R	10 PASSED	1200 N/R	13	252	13
30287		Z.	←	Digital,	Digital, Processing Unit, Central	Central			HMOS		
	428	N/R	S	1500 Ohms	100E-12 F	5 N/R	10 PASSED	1200 N/R	13	252	13
	730	N/R	S.	10M Ohms	N/R F	3 N/R	10 FAILED 10 PASSED	1800 PIN 39 1500 N/R	13 13	149	55
	627	N/R	S	C Ohms	50E-12 F	3 N/R	10 PASSED	600 PIN 39	13	237	13
8031		LN I	-	Digital, P.	Processing Unit, Central	Central			HMOS		
	827	N/R	SN	1500 Ohms	160E-12 F	S N/R	10 PASSED	1200 N/R	13	252	13
	625	X X	S.	0 Ohms	50E-12 F	3 N/R	10 FAILED 10 FAILED	300 N/R 350 N/R	13	237	13
8032		INI	-	Digital, I	Digital, Processing Unit, Central	Central			NMOS		
	758	N/R	N _S	1500 Ohms	100E-12 F	5 N/R	10 PASSED	1200 N/R	13	252	13
	627	x x	N _S	0 Ohms	50E-12 F	3 N/R	10 FAILED 10 FAILED	400 N/R 450 N/R	13	237 237	13 13
8039		N/R	-	Digital, M	Micro Computer				SOMN		
	384	*/ R	SS	1000 Ohms	200E-12 F	1 N/R	1 FAILED	1700 EACH PIN(+)	52	116	72

Technology			ia Remarks Remarks		52 131 24	52 107 24	10	13 252 13	13 237 13	10			118	115	60	13 252 13	717	13 237 13	S	103 252 13	ω	
Techi	NMOS	Failure	ination Criteria				HMOS			SOMN			PIN(+)		SOWH				SOWN	1	SOWN	
		Test	Result Voltage Pin Combination	900 EACH PIN(+)	1400 EACH PIN(+)	400 EACH PIN(+)		1200 N/R	600 N/R		1200 EACH PIN(+)		600 EACH	600 EACH PIN(+)		1200 N/R		400 N/R 450 N/R		1000 N/R		
		Test		-	1 FAILED	1 FAILED		10 PASSED	10 PASSED		1 FAILED	1 FAILED	1 FAILED	1 FAILED		10 PASSED		10 FAILED		1 FAILED		
	ter	Number Date Number	Fulses				ter	5 N/R	3 N/R	ter	1 N/R				Unit, Central	5 N/R		3 N/R	Unit, Central	1 N/R	Unit, Central	
	Digital, Micro Computer	Test					tal, Micro Computer	Ohms 130E-12 F	Ohms 50E-12 F	Digital, Mismo Computer	Obms 200E-12 F				Digital, Processing Unit, Central	Ohms 100E-12 F		Ohms 50E-12 F	Digital, Frocessing Unit, Central	Onms 100E-12 F	tal, Processing Unit, Central	
;		est Test	Source Date Type Resistance	SS 1000 Ohms			1 Digital	GN 1500 Oh	6N 0 Oh	1 Digital	ss 1000 Ob	2			1 Digital	GN 1503 Oh		do o	1 Digital	N/R 1500 OF	1 Digital	
	N/R 1	Test Test Test	urce Date I	N/R S	:		Ĭ.N.I	8/8	N/R	X / X	2/2	•			IN I	N/R		N/R	X/X	₹ 	N/R	
	(Lont'a)	Tes	S	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$				\$75	627		78%	Š				827		627		030		
Part	8039						8039			8048					8051				8080		8085	

1	General Remarks 13		13	13	13	13	13	13	13	4	4	4		13 13 13
	rks 237 237		149	149	149	149	149	149	149	252	252	252		252 252 252 252
Technology HMOS	Failure Test Criteria Remai	SOWH	100	100	100	100	100	100	100	100	100	100	SOWH	£ £ £ £
	Test Voltage Pin Combination 220 N/R 600 N/R		1500 PINS 5,21, AND 32	1750 PINS 5,21, AND 32	2000 PINS 5,21, AND 32	2000 PINS 5,21, AND 32	2250 PINS 5,21, AND 32	2250 PINS 5,21, AND 32	2500 PINS 5,21, AND 32	2750 PIN21	4500 PIN 21	5000 PIN 21		1000 PIN 2 950 PIN 4 1050 PIN 11 1000 PIN 34
	Date Number Test Te Code Devices Result V N/R 10 FAILED		1 FAILED	1 FAILED	2 FAILED	2 FAILED	1 FAILED	4 FAILED	3 FAILED	1 FAILED	1 FAILED	1 FAILED		10 FAILED 10 FAILED 10 FAILED 10 FAILED
t, Central	Number Date Pulses Code I 3 N/R	t, Central	11 N/R	14 N/R	16 N/R	15 N/R	18 N/R	17 N/R	20 N/R	22 N/R	30 N/R	32 N/R	t, Central	5 N/R
on Processing 'nit, Central	Test <u>Capacitance</u> 50E-12 F	Digital, Processing Unit, Central	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	٠ .	0	٥	Processing Unit, Central	100E-12 F
Part <u>Descripti</u> Digital,	Test Test Test Test <u>Source Date Type Resistance</u> 429 N/R GN O Ohms	Digital, Pr	1500 Ohms	O Ohms	0 Ohm.	0 Ohms	Digital, Pr	1500 Ohms						
Part ESD Mfr Class INT 1	Test Test Ce Date Iype N/R GN	VAR 3	1283 SS	1283 SS	1283 SS	1283 SS	L	N/R GN						
(Cont'd)	Test Source 429		÷5;	757	727	727	727	727	727	753	753	753		758
Part Number (8085		5086											8086	

Part Number (Co	(Cont.d)	Part ESD Mfr Cla	ESD Class	Part Descripti	u01				*echnology	76	!
3036		L N	-	Digital,		Processing Unit, Central			SO Æ H		
	Test		Test Test	Test	Test	Number Date Number	Test	Test Voltage Pin Combination	Failure To	Test Ge Remarks Ro	General Remarks
	428	2 ×	Z Z	1500 Ohms		2	10 PASSED				13
	459	N/R	S	U Ohms	s 50E-12 F	3 N/R	10 PASSED	600 N/R	13	237	13
3087		, N	-	Digital,		Processing Unit, Central			SOMH		
	627	X/R	S	0 Ohms	is 50E-12 F	3 N/R	10 PASSED	600 N/R	13	237	13
	758	N/R	8	1500 Ohms	IS 100E-12 F	5 N/R	10 PASSED	1200 N/R	13	252	13
8083		7. F.	1	Digital,		Processing Unit, Central			HMOS		
	758	X / X	8	1500 Ohn	1500 Ohms 100E-12 F	5 N/R	10 PASSED 10 PASSED	1200 N/R 1200 N/R	13	252 252	13 13
	627	N/R	ß	0 Ohms	is 50E-12 F	3 N/R	10 PASSED	600 N/R	13	237	13
8089		N.	-	Digital,		Processing Unit, Central			HMOS		
	758	N/R	S	1500 Ohms	is 100E-12 F	S N/R	10 PASSED	1200 N/R	13	252	13
80086		HAR	3	Digital,		Processing Unit, Central			CMOS		
	927	1186	1186 SS	1500 Ohms	ns 100E-12 F	18 8706	06 2 PASSED	4000 INPUT TO GND	2	252	м
810		VAR	2	Digital,		Multifunction, RAM, 1/0, limer	limer		SOWO		
	727	0983	0983 SS	1500 Ohms	ns 100E-12 F	6 N/R	S FAILED	750 PINJ 9 AND 3	97	149	13

	General Remarks 13	7	7	7	7	7		54	54	57	54		13	13	13	4	4	4
YB	Test G Remarks R 149	252	252	252	252	252		123	123	120	108		149	149	149	252	252	252
Techno_ogy	Failure T Criteria R 46	97	97	97	97	97	SOWN	52	52	55	52	SOWN	97	97	97	100	100	100
	Voltage Pin Combination 750 PiNS 9 AND 3	750 PINS 9 AND 3	1000 PINS 9 AND 3	1250 PINS 9 AND 3	1500 PINS 9 AND 3	1500 PINS 9 AND 3		700 EACH PIN(+)	EACH	EACH	506 EACH PIN(+)		1750 PINS 4,7,9, AND 10	1750 PINS 4,7,9, AND 10	2000 PINS 4,7,9, AND 10	2000 PINS 1,2,12, AND 37	3250 PINS 1,2,12, AND 37	3750 PINS 1,2,12, AND 37
1 mer	Number Test Devices Result 10 FAILED	1 FAILED	1 FAILED	2 FAILED	1 FALLED	10 FAILED		1 FAILED	1 FAILED	1 FAILED	1 FAILED		1 FAILED	3 FAILED	10 FAILED	1 FAILED	1 FAILED	1 FAILED
Part <u>Description</u> Digital, Multifunction, RAM, 1/0, Timer	Number Date Pulses Code 5 N/R	5 N/R	8 N/R	9 N/R	12 N/R	11 N/R		1 N/R					14 N/R	13 N/R	16 N/R	16 N/R	26 N/R	30 N/R
n ultifunction	Test <u>Capacitance</u> 100E-12 F	٥ ک	0	0	0 ٦	0	emory, RAM	200E-12 F				mory, RAM	100E-12 F	100E-12 F	100E-12 F	u 0	u. O	0
Part <u>Description</u> Digital, Mu	Test Resistance 1500 Ohms	0 Ohms	0 Ohms	0 Ohms	0 Ohms	0 Ohms	Digital, Memory,	1000 Ohms				Digital, Memory, RAM	1500 Ohms	1500 Ohms	1500 Ohms	0 Ohms	Ohms O	0hms
Part ESD Mfr Class VAP 2	Fest Test <u>Date Type</u> 0983 SS	0983 SS	SS £860	SS £860	0983 SS	0983 SS	N/R 1	N/R SS				VAR 3 C	1083 SS 1	1083 SS 1	1083 SS 1	1083 SS (1083 SS 0	1083 SS 0
(Cont'd)	Source 424	453	423	423	753	423	-	384					727	727	727	423	423	423
Part Number (810							8155					8155						

	General S Remarks		7	4	4	4		7 13		7 13		2 13	7 13	2 13	7 13		2 13
760	Test Remarks	252	252	252	252	252		237		237		252	237	252	237		252
Technology	Faiture I Criteria F	100	100	100	100	100	SOWH	13	HMOS	13	HMOS	13	13	13	13	HMOS	13
	Test Voltano Din Comb nation		4000 PINS 1,2,12, AND 37	4250 PINS 1,2,12, AND 37	4500 PINS 1,2,12, AND 37	4750 PINS 1,2,12, ANG 37		600 PINS 8,9,AND 11		600 N/R		1200 PINS 13,15,16,ANJ 17	600 PINS 10,11,12,15,16,AND 17	1200 N/R	600 N/R		1200 N/R
	Test		2 FAILED	1 FAILED	1 FAILED	2 FAILED		10 PASSED		, PASSED		10 PASSED	10 PASSED	10 PASSED	10 PASSED		10 PASSED
	Number Date Number	29 N/R	32 N/R	33 N/R	35 N/R	37 N/R		3 N/R		3 N/R		5 N/R	3 N/R	5 N/R	3 N/R	Oynamic	5 N/R
, Memory, RAM	Test	Udbacitance Puises 0 F 29	0	0	0 F	u 0	Memory, RAM	50E-12 F	, Memory, RAM	50E-12 F	, Memory, RAM	100E-12 F	50E-12 F	100E-12 F	50E-12 F	Digital, Memory, RAM, Dynamic	100E-12 F
Part Description Digital, Med	Test	423 1083 SS 0 0hms	0 Ohms	0 Shms	0 Ohms	0 Ohms	Digital, M	Ohms	Digital, M	0 Ohms	Digital, M	1500 Ohms	0 Ohms	1500 Ohms	0 ∩hms	Digital, f	1500 Ohms
FSD CLass	Test Test Test	1083 SS	1083 SS	1083 SS	1083 53	1083 SS	-	χ α	-	S. S.	-	NS W	S ∝	R GN	NS W	-	χ 25
Part MTF VAR	ě	100 Da	101	100			TN1	N/R	N.	N/R	L X	N/R	N/R	N/R	N/R	, N	N/R
(Cont'd)	Test	257 7008	233	423	527	753		627		627		758	527	758	627		827
Part Number 8155							8155		8156		8185					8202	

İ	General Remarks 13	<u> </u>	13		13	13		13	13	13	13		13	13
33	Test G	İ	252		237	252		237	252	252	237		237	252
Technology	Failure Te Criteria Re	SOWH	13	SOWH	13	13	HMOS	13	13	13	13	NWOS	13	13
	Test Test Result Voltage Pin Combination PASSED 1200 N/R		1200 N/R 1200 N/R		600 N/R	1200 N/R		50C N/R	1100 N/R	1200 N/R	450 N/R 550 N/R		450 N/R	1200 N/R
	Number Test Transcription Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Vision Visi		10 PASSED 10 PASSED		10 PASSED	10 PASSED		10 FAILED	10 FAILED	10 PASSED	10 FAILED 10 FAILED		10 FAILED	10 PASSED
ynamic	Number Date Number Pulses Code Devices 5 N/R 10	ynamic	5 N/R	orrect	3 N/R	3 N/R	улатіс	3 N/R	5 N/R	S N/R	3 N/R	Dynamic	3 N/R	5 N/R
Part Description Digital, Memory, RAM, Dynamic	Test <u>Capacitance</u> 100E-12 F	Digital, Memory, RAM, Dynamic	100E-12 F	Digital, Error Detect/Correct	50E-12 F	100E-12 F	Digital, Memory, RAM, Dynamic	50E-12 F	50E-12 F	100E-12 F	50E-12 F	Digital, Memory, RAM, Dy	50E-12 F	100E-12 F
Part <u>Descriptior</u> Digital, Me	Test Resistance 1500 Ohms	Digital, I	1500 Ohms	Digital, E	O Ohms	1500 Ohms	Digital, M	0 Ohms	O Ohms	1500 Ohms	0 Ohms)igital, M	O Ohms	1500 Ohms
ESD Class	Test Type GN	-	2 5		Š	N G	-	Š	NS.	S	- 85	-	8	35
Part ESD Mfr Clar INT	Test Test Source Date 428 N/R	TN	X X	×	N/R	N/R	TAI	N/R	N/R	X/R	N/R	IN I	X/R	× ×
1	Test Source 428		758		627	428		627	627	758	627	-	625	428
Part Number (Cont'd) 8202		8203		8206			8207					8208		

Part	Part ESD Part Mfr Class Description		Technology	
8212			STTL	
	Test Number Date Number Test		failure Test	
	Source Date Type Resistance Capacitance Pulses Code Devices Result Vo 428 N/R GN 1500 Ohms 100E-12 F 5 N/R 10 FAILED	Voltage Pin Combination 560 PIN 11	Criteria Remarks	252 13
į			ori G	
8214	INT 1 Digital, Controller		100	
	428 N/R GN 1500 Ohms 100E-12 F 5 N/R 10 FAILED	775 PINS 2,6,7,AND 20	13	252 13
8254	INT 1 Digital, Multivibrator		SOWH	
	428 N/R GN 1500 Ohms 100E-12 F 5 N/R 10 FAILED	620 PINS 2 AND 5	£1	252 13
8228	INT 1 Digital, Line/Bus Driver		SOWH	
	428 N/R GN 1500 Ohms 100E-12 F 5 N/R 10 FAILED	512 PINS 1,6, AND 7	55	252 13
82284	INT 1 Digital, Multivibrator		NMOS	
	429 N/R GN 0 Ohms 50E-12 F 3 N/R 10 PASSED	600 ALL INPUT PINS	13	237 13
	428 N/R GN 1500 Ohms 100E-12 F 5 N/R 10 PASSED	1200 2,3,4,6,7,11,12,13,16,17	13	252 13
82288	SIG 1 Digital, Controller		HMOS	
	029 N/R N/R 1500 Ohms 100E-12 F 1 N/R 1 FAILED	1576 N/R	102	189 13
82288	iNT 1 Digital, Controller		HMOS	
	429 N/R GN 0 Ohms 50E-12 F 3 N/R 10 PASSED	600 PIN 19	13	237 13

	General	13		13	13	13		13	13	13	13	13		13		13
37	Test Ge Domarks Do			237	252	149		237	252	149	252	237		252		252
Technology	Failure Te		HMOS	13	13	13	HMOS	13	13	13 13	13	13	NMOS	13	SOWH	13
	Test Voltade Pin Combination	1200 N/R		600 N/R	1200 N/R	1500 N/R		400 N/R	1200 N/R	1200 PIN 5 1200 PINS 11,12,13,16,17,AND 18	1200 N/R	600 N/R		512 PINS 2,3, AND 22		1200 N/R
	Test	PASSED		10 PASSED	10 PASSED	10 PASSED		10 FAILED	10 PASSED	10 PASSED 10 PASSED	10 PASSED	10 PASSED		10 FAILED		10 PASSED
	Number Date Pulses Code	5 N/R		3 N/R	5 N/R	3 N/R		3 N/R	5 N/R	3 N/R	5 N/R	3 N/R	Ļ	5 N/R	it-Output	5 N/R
on Controller	Test Capacitance			50E-12 F	100E-12 F	N/R	ontroller	50E-12 F	100E-12 F	100E-12 F	100E-12 F	50E-12 F	ine/Bus Driver	100E-12 F	Digital, Expander, Input-Output	100E-12 F
Part <u>Descripti</u> Digital, (Test Test Test Source Date Type Resistance	428 N/R GN 1500 Ohms	Digital	0 Ohms	1500 Ohms	10M Ohms	Digital, C	0 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	O Ohms	Digital, Li	1500 Ohms	Digital, Ex	1500 Ohms
ESD Class	t Tes	3	-	3	3	N S	-	S	3	35	S	8	-	S.	-	QN
Part ESD Mfr Clas	Tes' e Date	N/R	INI	N/R	N/R	N/R	IN T	N/R	Z/R	N/R	N/R	N/R	IN ⊢	N/R	INT	N/R
(Cont'd)	Test	428		627	877	730	_	459	428	428	827	627	-	827	-	758
Part Number (82288			82289				8237						8238		8243	

Technology	Failure Test General Criteria Remarks Remarks 13 237 13	Bipolar	13 237 13 13 237 13	SOWH	13 237 13 13 237 13	SOWN	102 271 13	13 237 13 13 237 13	13 252 13	SOWN	52 121 24 52 129 24	NMOS	13 237 13
1	age Pin Combination	88	350 N/R 350 N/R	-	550 N/R 550 N/R	2	2000 15(INPUT) 24(VCC)	600 N/R 550 N/R	1100 N/R	-	1400 EACH PIN(+) 800 EACH PIN(+)		500 N/R
	lumber Test Test <u>Vevices Result Volts</u> 10 PASSED		10 FAILED 10 FAILED	Controller, Communications, Programmable	10 FAILED 10 FAILED	ī	2 FAILED	10 PASSED 10 FAILED	10 FAILED	ع (1 FAILED 1 FAILED		10 FAILED
it-Output	Number Date Pulses Code 3 N/R	ithernet	3 N/R	momunications,	3 N/R	mable Interva	1 N/R	3 N/R	S N/R	mable Interva	1 N/R	۵	3 N/R
Part Description Digital, Expander, Input-Output	Test Test Test Test Source Date Type Resistance Capacitance 429 N/R GN 0 Ohms 50E-12 F	Digital, Transceiver, Eithernet	0 Ohms 50E-12 F	Digital, Controller, Cc	0 Ohms 50E-12 F	Digital, Timer, Programmable Interval	1500 Ohms 100E-12 F	0 Ohms 50E-12 F	1500 Ohms 100E-12 F	Digital, Timer, Programmable Interval	1000 Ohms 200E-12 F	Digital, Counter/Divider	0 Ohms 50E-12 F
SS -	Test Test Test Date Type Resi N/R GN 0	-	N	-	8	-	SS	N	NS.	-	SS	-	ß
Part ESD Mfr Clas	Test Ce Date N/R	I.N.	X/X	INI	X/X	INT	7860	N/R	N/R	N/R	N/R	N.	N/R
(Cont'd)	Test Source 429		459		627		393	627	827		384		627
Part Number 8243		82501		8251		8253				8253		8254	

		General	Remarks	. E	13	13	13		13		13	13			13		13	13	13		13
<u>~</u>		Test Ge		252	237	237	237		237		237	252			237		237	252	237		237
Technology	HMOS	Failure Te		ច ជ	13	13	13	HMOS	13	HMOS	13	13	,	SOE	13	SOWH	13	13	13	SOWH	13
		Test	Voltage Pin Combination	1200 N/R	550 N/R	600 N/R	600 N/R		550 N/R		600 N/R	1200 N/R			380 N/R		400 N/R	400 N/R	400 N/R		450 N/R
		Test	Devices Result Vo	10 PASSED	10 FAILED	10 PASSED	10 PASSED		10 FAILED		10 PASSED	10 PASSED			10 FAILED		10 FAILED	10 FAILED	10 FAILED		10 FAILED
		Date	Pulses Code D		3 N/R			Trigger	3 N/R		3 N/R	S N/R			3 N/R	, Central	3 N/R	S N/R	3 N/R		3 N/R
Part Description	Digital, Counter/Divider	Test	Source Date Type Resistance Capacitance F 428 N/R GN 1500 Ohms 1005-12 F		0 Ohms 50E-12 F			Digital, Buffer, Schmitt Trigger) Ohms 50E-12 F	Digital, Transceiver) Ohms 50E-12 F	1500 Ohms 100E-12 F	Digital Controller) Ohms 50E-12 F	Digital, Processing Unit, Central	Ohms 50E-12 F	1500 Ohms 100E-12 F	Ohms 50E-12 F	Digital, Controller	Ohms 50E-12 F
SS	~	Test Test Test	8 2 3 3	,	NS.			~	0 N5	1	O NO	S	-		O NS	-	O NO	GN 1	0	1 0	0 89
	L N	Test	e Date		N/R			INI	X/R	INT	N/R	Z/R	I.		N/R	INT	N/R	N/R	N/R	INI	N/R
(Cont'd)		Test	Sonuc 758		459			-	627	1	459	428	1	•	456		627	758	625	-	627
اے	8254							8255		8256			8257			82586				82588	

	(Cont.d)		ESD	Part Description	OI				Technology		
82588		N.	-		Controller				HMOS		
	Test Source 428	Test ce Date N/R	Test Test Test Date Type Resis	Test Resistance 1500 Ohms	Test <u>Capacitance</u> 100E-12 F	Number Date Pulses Code 5 N/R	tumber Test To Devices Result Vo 10 PASSED	Number Test Test Devices Result Voltage Pin Combination 10 PASSED 1200 N/R	Failure Test Criteria Remai	<u>rks</u> 252	General Remarks 13
8259		LN1	-	Digital, (Controller				NMOS		
	428	χ χ	N _O	1500 Ohms	1500 Ohms 100E-12 F	5 N/R	10 FAILED 10 PASSED 10 PASSED	950 PINS 3,26,AND 27 1200 N/R 1200 N/R	13 13 13	252 252 252	13 13 51
	459	X/R	S	O Ohms	50E-12 F	3 N/R	10 PASSED	600 N/R	13	237	13
8259A		AMD	-	Digital, 1	Processing Unit, Central	it, Central			MOS		
	392	1186	SS	1500 Ohms	1500 Ohms 100E-12 F	1 N/R	S FAILED	450 EACH PIN TO 14 & 28 (+ -)	19	252	13
8272		INI	-	Digital,	Controller				HMOS		
	758	N/R	S.	1500 Ohms	1500 Ohms 100E-12 F	5 N/R	10 PASSED	1200 N/R	13	252	13
	459	N/R	Š	0 Ohms	50E-12 F	3 N/R	10 PASSED	600 N/R	13	237	13
8274		INI	-	Digital,	Controller				SOWH		
	627	N/R	N	0 Ohms	s 50E-12 F	3 N/R	10 FAILED 10 FAILED	550 N/R 551 N/R	13	237	13 13
8276		N F	-	Digital,	Controller				HMOS		
	827	₹/R	S	1500 Ohris	ns 100E-12 F	5 N/R	10 PASSED	1200 N/R	13	252	13

	General	Remarks 13		13		13		13 13 14 15	13		13		13		13
76	est.	237		25.3		252		252 252 252 252 252	237		252		252		252
Technology KMOS	Failure Test	Uriteria Remarks 13 237	HMOS	13	NWOS	13	HMOS	13 13 13	13	SOWH	13	SOWH	13	SOMH	13
	Test	600 N/R		1200 N/R		669 PINS 1,2,AND 19 1200 N/R		325 PIN 11 887 PIN 11 1200 N/R 300 N/R	150 N/R		120J N/R		1200 N/R		1193 PINS 1,2,AND 19
	Number Date Number Test 1	N/R 10 PASSED		10 PASSED		10 FAILED 10 PASSED		10 FAILED 10 FAILED 10 PASSED 10 FAILED	10 FAILED		10 PASSED		10 PASSED		10 FAILED
yboard	Number Date	3 N/R		5 N/R		5 N/R		5 N/R	3 N/R		5 N/R		S N/R		5 N/R
Part ESD Part Mfr Class Description INT 1 Digital, Controller, Keyboard	Test Test Test Test Number Page Date Type Resistance Canaditance Dulese	429 N/R GN 0 Ohms 50E-12 F	INT 1 Digital, Latch	N/R GN 1500 Ohms 100E-12 F	INT 1 Digital, Latch	N/R GN 1500 Ohms 100E-12 F	INT 1 Digital, Multivibrator	N/R GN 1500 Ohms 100E-12 F	N/R GN 0 Ohms 50E-12 F	INT 1 Digital, Transceiver	N/R GN 1500 Ohms 100E-12 F	INT 1 Digital, Transceiver	N/R GN 1500 Ohms 100E-12 F	INT 1 Digital, Controller	N/R GN 1500 Ohms 100E-12 F
	Test	627		428		428		758	456	_	428	~	428	prof	827
Part Number 8279			8282		8283		8284			8286		8287		8288	

ı	General Remarks 13 13	13	13	13	13		3	٣	٣	юю	M
	752 252	237	252	237	237		252	252	252	252 252	252
Technology	Failure Test Criteria Remar	13	HMOS 13	HMOS 13	HMOS 13	CMOS	2	2	2	S S	\$
	Voltage Pin Combination 1230 N/R 550 N/R	150 N/R	887 PINS 4,5,AND 6	600 N/R	600 N/R		1200 INPUT TO GND	600 INPUT TO GND	800 OUTPUT TO INPUT	600 INPUT TO OUTPUT 600 VCC TO OUTPUT	1000 INPUT TO GND
		10 FAILED	10 FAILED	10 PASSED	10 PASSED		1 FAILED	1 FAILED	1 FAILED	1 FAILED 1 FAILED	1 FAILED
	Number Date Number Test Pulses Code Devices Resul 5 N/R 10 PASSE	3 N/R	Bus Arbitrator 5 N/R	Digital, Controller, Bus Arbitrator O Ohms 50E-12 F 25 N/R	3 N/R		10 N/R	S N/R	7 N/R	S N/R	9 N/R
ntroller	Test <u>Capecitance</u> 100E-12 F	50E-12 F	ontroller, Bu 100E-12 F	ontroller, Bu 50E-12 F	ransceiver 50E-12 F	ransceiver	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F
Part <u>Description</u> Digital, Controller	Test Resistance 1500 Ohms	Ohms	Digital, Controller, 1500 Ohms 100E-12 F	Digital, Co O Ohms	Digital, Tu O Ohms	Digital, T	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms
Part ESD Mfr <u>Class</u> INT 1	Test Test Date Type N/R GN	N/R GN	INT 1 N/R GN	INT 1 N/R GN	INT 1	HAR 1	1186 SS	1186 SS	1186 SS	1186 SS	1186 SS
Part (Cont'd) Mfr INT	Test Source 428	627	114	627	11	Í	927	9£7	927	436	927
Part Number (6 8288			8289	8291	8293	82052					

Part Number 82C59A	Part ESD Mfr Class HAR	Part ISS Descripti 1 Digital,	Controller				Technology CMOS	97	
- vii 4	Test Test Test Test Source Date Type Resistance 436 1186 SS 1500 Ohms	est Test <u>ype Resistanc</u> S 1500 Ohms	Test <u>Capacitance</u> 100E-12 F	Number Date Number Pulses Code Devices 3 8709	Test Result FAilED	Test <u>Voltage Pin (cmpination</u> 400 VCC TC OUTPUT	failure I Criteria R	Test Ge Remarks Re 252	General Remarks 3
	HAR	1 Digital,	Line/Bus Driver				CMOS		
7	436 1186 S	SS 1500 Ohms	. 100E-12 F	5 8720	2 FAILED	600 INPUT TO GND	5	252	~
4	436 1186 SS	s 1500 Ohms	100E-12 F	6 8720	2 FAILED	700 INPUT TO GND	5	252	~
	HAR	1 Digital,	Line/Bus Driver				CMOS		
4	436 1186 SS	s 1500 Ohms	100E-12 F	6 8710	2 FAILED 2 FAILED	700 INPUT TO GND 700 INPUT TO GNC	5 2	252 252	κк
	INT	1 Digital, C	Controller				CMOS		
4	430 N/R GN	V 10M Ohms	N/R	5 N/R	10 PASSED	1500 PIN 11	13	252	13
4	429 N/R GN	4 0 Ohms	50E-12 F	3 N/R	10 PASSED	600 N/R	13	149	13
4	428 N/R GN	4 1500 Ohms	100E-12 F	3 N/R	10 PASSED	1200 PINS 1,2,3,6,15,18,AND 19	13	237	13
	HAR	1 Digital, Controller	Controller				CMOS		
.4	436 1186 SS	1500 Ohms	100E-12 F	7 N/R	2 FAILED 2 FAILED 2 FAILED	800 INPUT TO GND 800 INPUT TO GND 800 INPUT TO GND	2 2 2	252 252 252	M M M
	N/R	1 Digital, M	Digital, Memory, PROM				. 1TL		
<u>:</u> 0	030 N/R N/	N/R 1500 Ohms	100E - 12 F	1 N/R	1 FAILED	1000 N/R	103	252	13

Part Number 825123		Part Mfr N/R	ESO Class 1	Part <u>Descripti</u> Digital,	ion Memory, PROM				Technology STTL		ı
	Test Source 030	9)	st Test te Type R N/R	Test Test Test <u>Date Type Resistance</u> N/R N/R 1500 Ohms	Test ce Capacitance s 100E-12 F	Number Date Number Test Pulses Code Devices Result 1 N/R 1 FALL8	+ 1 0	Voltage Pin Combination 1000 N/R	Failure Test Criteria Remarks 153 252	t General	aral 13
825123		816	-	Digital,	Memory, PROM				STTL		
	736		1186 SS	1500 ОРМ	1500 Ohms 100E-12 F	6 N/R	1 FAILED	700 INPUT TO CAST-01	un	395	*
828129		N/R	-	Digital,	Memory, PROM				3118		
	030	N/R	x x/x	1500 Ohms	s 100E-12 F	1 N/R	1 FAILED	1000 N/R	\$ 0.	252	13
825129		816	-	Digital,	Memory, PROM				STTL		
	736		1186 SS	1500 Ohms	s 100E-12 F	6 N/R	5 FAILED	700 INPUT TO GND	ī.	252	~
825131		N/R	-	Digital,	Memory, PROM				STT1.		
	030	N/N	R N/R	1500 Ohms	s 100E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13
825137		N/R	-	Digital,	Memory, PROM				STTL		
	030	N/R	R N/R	1500 Ohms	s 100E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13
825141		X / X	-	l Digital,	Memory, PROM				STTL		
	030	X,X	R /R		1500 Ohms 100E-'2 F	1 N/R	1 FAILED	1000 N/R	103	252	13
825181		8/2	•	1 Digital,	Memory, PROM				STTL		
	030	N/R	R N/R	R 1500 Օհաs	ns 100E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13

	General Remarks 13		*.		мм	M	кк	3		13		21		21
χē					252 252	252	252 252	252		252		186		186
Technology	Failure Test Criteria Remarks 103 252	S171		STIL	īv īv	5	δ ₂	\$	STTL	103	STTL	25	STTL	25
	Voltage Pin Combination 1000 N/R				600 INPUT TO GND 600 INPUT TO GND	400 INPUT TO GND	600 INPUT TO GND 600 INPUT TO GND	800 INPUT TO GND		1000 N/R		31 INPUT(+) GND(-)		41 INPUT(+) GND(-)
	Test Result FAILED		1.4660	÷	S FAILED S FAILED	1 FAILED	5 FAILED 5 FAILED	5 FAILED		1 FAILED		15 FAILED		15 FAILED
	Number Date Number Pulses Code Devices 1 N/R 1		1 N/R		5 N/R	3 N/R	5 N/R	7 N/R		1 N/R		1 N/R		1 N/R
Part ESD Part Mfr Class Description N/R 1 Digital, Memory, PROM	Test Test Test Test Test Ce Date Type Resistance Capacitance N/R N/R 1500 Ohms 100E-12 F	N/R 1 Digital, Memory, PROM) N/R N/R 1500 Ohms 100E · 12 F	SIG 1 Digital, Memory, PROM	1186 SS 1500 Ohms 100E-12 F	1186 SS 1500 Ohms 100E-12 F	1186 SS 1500 Ohms 100E-12 F	, 1185 SS 1500 Ohms 100E-12 F	N/R 1 Digital, Memory, PROM	N/R N/R 1500 Ohms 100E-12 F	N/R 2 Digital, Multiplexer	N/R SS 100 Ohms N/R	N/R 3 Digital, Multiplexer	N/R SS 100 Ohms N/R
Part Number 82S18S	Test Sour 030	825191	030	925191	. 36	739	9£7	436	8252708	030	82534	572	82567	572

Part			SS			,				Technology	>	
Number			class		Description					110		
8481		216	Z		uigital, bate	are				l i		
	1001	Test	10.5	Test Test Test		Test	Number Date Number	Test	Test	Failure Test		General
	757	o Date	2	P Resi	Source Date Type Besistance	Capacitance	Pulses Code De	Result	Voltage Pin Combination	Criteria Re	Remarks Rem	Remarks
	620	2/x	× ×	1500	1500 Ohms	100E-12 F	۲/ ×	FAILED	164722 N/R	102	188	13
8656		PLE	-	igid	Digital, Li	ine/Bus Driver	ر			Bipolar		
	393	0385 SS	SS 5	1500	1500 Ohms	100E-12 F	1 N/R	1 FAILED	1000 8(INPUT) 2(VCC)	102	252	13
8685		PLE	-	0.19	ital, C	Digital, Counter/Divider	Ĺ			ECL		
	393	1184	1184 SS	1500	1500 Ohms	100E-12 F	1 N/R	2 FAILED	1500 15(INPUT) 8(VEE)	102	252	13
8741		INI	-	0 19	Digital, T	ransceiver, Input-Output,		RAM		HMOS		
	459	α 2	3	0	Ohms	50E-12 F	3 N/R	10 FAILED	500 N/R	13	237	13
	428	X /R	SN SN		1500 Ohms	100E-12 F	S N/R	10 FAILED 10 FAILED 10 FAILED	1050 N/R 1100 N/R 900 N/R	13 13 13	252 252 252	£1 £1
	627	x %	S	0	Ohms	50E-12 F	3 N/R	10 FAILED 10 FAILED	550 N/R 500 N/R	13 13	237	ដ
8742		IN.	_	ei0 l	ital, (Jontroller, P€	Digital, Controller, Peripheral Interface	rface		NHMOS		
	627	N/R	35	0	Ohms	50E-12 F	3 N/R	10 PASSED	600 N/R	13	237	13
	428	X X	8		1500 Ohms	100E-12 F	5 N/R	10 PASSED	1200 N/R	13	252	13
77/8		IN	•	1 Dig	Digital, M	Memory, EPROM				SOMH		
	627	N/N	S	0	Ohms	50E 12 F	3 N/R	10 PASSED	600 N/R	13	237	13

(Cont'd)	Part	Part ESD Mfr Class		ion				Technology	>	
	IN.	-	Digital,	Digital, Memory, EPROM				HMOS	75	}
Sour 428	Test Test Source Date 428 N/R	Test Test Test Source Date Type 428 N/R GN	E Resistance 1500 Ohms	Test Capacitance 100E-12 F	Number Date Number Pulses Code Devices 5 N/R 10	fest <u>Result</u> PASSED	Voltage Pin Combination 1200 N/R	Failure Criteria F	Test G Remarks R 252	General Remarks 13
	INI	-	Digital,	Digital, Processing Unit, Central	, Central			HWOS		
428	N/R	R GN	1500 Ohms	s 100E-12 F	5 N/R	10 PASSED 10 FAILED	1200 n/r 700 n/r	13 13	252 252	13
O.	429 N/R	NO 2	0 Ohms	s 50E-12 F	3 N/R	10 FAILED 10 FAILED	500 N/R 400 N/R	13 13	237	13 13
	N/R	-	Digital,	Digital, Memory, EPROM				SOWN		
	384 N/R	SS	1000 Ohms	; 200E-12 F	1 N/R	1 FAILED 1 FAILED	1900 EACH PIN(+) 500 EACH PIN(+)	52 52	125	54 54
	N/R	1	Digital,	Digital, Transceiver				STTL		
030	x X		N/R 1560 Ohms	100E-12 F	1 N/R	1 FAILED	1000 N/R	103	252	13
	N/R	-	Digital,	Digital, Transceiver				STTL		
030	N/R	N/R	1500 Ohms	100E-12 F	I N/R	1 FAILED	1000 N/R	103	252	13
	SIG	-	Dígital					111		
383	<u>χ</u>	SS	1500 Ohms	100E-12 F	1 N/R	1 FAILED 1 FAILED 1 FAILED	1728 IN.(+) APTT(-) 507 OUT.(+) APTT(-) 459 VCC(+) APTT(-)	67 67	188 188 188	ထထထ

Part Number 9093		Part 6	ESO Class	Part Descripti Digital,	on Flip-Flop				<u>Technology</u> DTL		1
	Sour 029	Source Date 029 N/R	t Test e Type N/R	Test Test Type Resistance N/R 1500 Ohms	Test Capacitance 100E-12 F	Number Date Number Test Pulses Code <u>Devices Resu</u> 1 N/R	::1 :::	Voltage Pin Combination 6123 N/R	Failure Test Criteria Remarks 102 188		General Remarks 13
9102		AMD	-	Digital, Me	Memory, RAM, Static	atic			NMOS		
	003		1175 SS	O Ohms	100E-12 F	1 N/R	1 FAILED	300 INPUT(+) PR. SUPPLY(-)	102	252	13
914		₩ 01	3	Digital,	Gate				RTL		
	020	N/R	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	5848 N/R	102	189	13
930		RAY	×	Digital,	Gate				DIL		
	620	N/R	₹ /8	1500 Ohms	100E-12 F	1 N/R	1 FAILED	4283 N/R	102	188	13
6056		FSC	2	Digital,	Multiplexer				TT.		
	390	N/R	8	1500 Ohms	100E-12 F	5 N/R	1 PASSED	2000 S/R	105	247	Ξ
93415		M 01	-	Digital,	Memory, RAM, St	Static			111		
	027	X ∕ R	N	1500 Ohms	100E-12 F	1 N/R	1 FAILED 13 PASSED	1000 N/R 1000 N/R	25	252 252	12
67756		FSC	33	Digital					יִדנ		
	020	N/N	x / x	1500 Ohms	100E-12 F	1 N/R	1 FAILED	806u N/R	102	189	13
935		FSC	2	Digital,	Inverter, Buffer	١			DTL		
	390	N/R	₹	1500 Ohms	100E-12 F	5 N/R	1 PASSED	2000 S/R	105	242	Ξ

Part Number 9383		Mfr FSC	ESD Class	Part Description Digital	uo.				Technology 1Tt		1
	Source 390] 8	st Tessite Type	Test Test Test Date Type Resistance N/R GN 1500 Ohms	Test <u>Capacitance</u> 100E-12 F	Number Date Number Pulses Code Devices 5 N/R	Test Result PASSED	Test <u>Voltage Pin Combination</u> 2000 S/R	failure Test <u>Criteria Remarks</u> 105 247		General <u>Remarks</u> 11
076		ξ,							DTL		
6428-037	390	A X X	GN 2		1500 Ohms 100E-12 F Digital, Array, PAL	5 N/R	1 PASSED	2000 S/R	105 CMOS	247	=
	392		ss 9860	1500 Ohms	100E-12 F	1 N/R	3 FAILED 3 FAILED	2500 EACH PIN TO 10 & 20 (+ -) 2500 EACH PIN TO 10 & 20 (+ -)	6t 6t	273 46	13
65776		FSC	×	Digital, (Gate				DTL		
	029	N/R	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	13426 N/R	102	188	13
976		NSC	2	Digital, G	sate				011		
	059	X	N/R	N/R 1500 Ohms	100E-12 F	1 N/R	1 FAILED 1 FAILED	5237 N/R 4192 N/R	102	188 188	£1 £1
976		N/R	٣	Digital, Gate	sate				DTL		
	572	N/R	SS	100 Ohms	R/R	1 N/R	15 FAILED	58 INPUT(+) GND(-)	25	186	21
876		NSC	~	Digital, F	Flip-Flop				DTL		
	020	æ/æ		N/R 1500 Ohms	100E-12 F	1 N/R	1 FAILED	5227 N/R	102	188	13

Part				•				50 00 do 0	,	
9601		FSC 2	Digital,	Multivibrator						
	Test	Test Test Test	st Test	Test	Date	Test	Test	Failure Test	ن د	General
	380	390 N/R GN	1500 Ohms	1500 Ohms 100E-12 F 5	N/R	1 PASSED	2000 S/R			11
9602		FSC 1	l Digital, M	Multivibrator				דר		
	390	N/R GN	1500 Ohms	100E-12 F	5 N/R	1 PASSED	2000 S/R	105	247	11
	392	0886 SS	1500 Ohms	100E-12 F	S N/R	5 FAILED	1050 PINS 3-5,11-13 TO GND,VCC	19	145	13
	392	1086 SS	1500 Ohms	100E-12 F	1 N/R	5 FAILED 5 FAILED	1125 EACH PIN TO 8 & 16 (+ -) 1250 EACH PIN TO 8 & 16 (+ -)	19	252 252	13
	392	0886 SS	1500 Ohms	100E-12 F	1 N/R	5 FAILED	1050 INPUT PINS TO GND & VCC	19	155	13
9614		FSC	1 Digital, L	Line/Bus Driver	-			Bipolar		
	920	0178 SS	100 Ohms	200E-12 F	1 N/R	4 FAILED	963 INPUT(5)(+) GND(8)(-)	9	285	13
	390	N/R GN	1500 Ohms	100E-12 F	5 N/R	1 PASSED	2000 S/R	105	247	Ξ
	736	1186 SS	1500 Ohms	100E-12 F	9 N/R	5 FAILED	1000 INPUT TO OUTPUT	2	252	M
	927	1186 SS	1500 Ohms	100E-12 F	12 N/R	5 FAILED	1600 INPUT TO OUTPUT	\$	252	M
	436	1186 SS	1500 Ohms	100E-12 F	13 N/R	5 FAILED	1800 INPUT TO GND	~	252	M
9614		TEX 2	2 Digital, L	Line/Bus Driver	_			Bipolar		
	390	N/R GN	1500 Ohms 100E-12	100E-12 F	5 N/R	1 PASSED	2000 S/R	105	242	Ξ
9614		MOT 3	3 Digital, L	Line/Bus Driver	ر			Bipolar		
	736	1186 SS	1500 Ohms	100E-12 F	18 N/R	5 PASSED	4000 N/R	\$	252	٠

1	General	13 13		13	٣		m		£1 £1	21		21		80		13
×	3	252 252		285	252		252		252 252	186		186		188		188
<u>Technology</u> Bipolar	Failure Test	103	Bipolar	•	5	Bipolar	S	Bipolar	103	25	Bipolar	24	111	67	DTL	102
	Test Voltage Din Combination	2000 N/R		230 N/R	1200 INPUT TO GND		900 INPUT TO OUTPUT		12000 N/R 12000 N/R	90 INPUT(+) INPUT(-)		112 INPUT(+) INPUT(-)		113 INJ.(-) APTT(+)		9561 N/R
	Test			4 FAILED	5 FAILED		5 FAILED		1 FAILED 1 FAILED	15 FAILED		15 FAILED		1 FAILED		1 FAILED
ر	Number Date Number Pulses Code Devices		ver	1 N/R	10 N/R	ver	8 N/R	/er	1 N/R	1 N/R		1 N/R	:, Central	1 N/R	'Binary	1 N/R
Part <u>Description</u> Digital, Line/Bus Driver	Test Stance Capacitance	1500 Ohms 100E-12 F	Digital, Line/Bus Receiver	100 Ohms 200E-12 F	1500 Ohms 100E-12 F	Digital, Line/Bus Receiver	1500 Ohms 100E-12 F	Digital, Line/Bus Receiver	N/R 1500 Ohms 100E-12 F	100 Ohms N/R	Digital, Line/Bus Driver	100 Ohms N/R	Digital, Processing Unit, Central	1500 Ohms 100E-12 F	Digital, Encoder, Octal/Binary	N/R 1500 Ohms 100E-12 F
ESD Class	Test Test Test Date Type Resis	N/R N/R	-	0178 SS	1186 SS	-	1186 SS	3		ss s	M	SS &	-	SS 2	2	
Part Mfr N/R	Test Test Source Date	X	FSC			TEX		N/R	N/R	N/R	N/R	N/R	TEX	N/R	FSC	N/R
(Cont'd)	Tes	030		026	927		736		030	545		572		383		620
Part Number 9614			9615			9615		9615			9616		0066		8066	

Part Number 9909		Part ESD Mfr Clas	ESD Class	Part Descripti Digital,	ion Gate				Technology		1
	Test Source 029	t Test rce <u>Date</u> N/R	t Test e <u>Type</u> N/R	Test Test Test Test Source Date Type Resistance 029 N/R N/R 1500 Ohms	Test <u>Capacitance</u> 100E-12 F	Number Date Number Test Pulses Code Devices Result 1 N/R 1 FAILED	비유	Test Voltage Pin Combination 7342 N/R	Failure Test General Criteria Remarks Remarks 102 188 13	st Gen <u>narks</u> <u>Rem</u> 188	General Remarks 13
0106		FSC	8	Digital,	Gate				RTL		
	020	N/R	x X	1500 Ohms	10CE-12 F	1 N/R	1 FAILED	4595 N/R	102	188	13
9911		FSC	3	Digital,	Gate				RTL		
	020	N/N	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	6371 N/R	102	188	13
9912		FSC	3	Digital					RTL		
	020	N/R		N/R 1500 Ohms	130g-12 F	1 N/R	1 FAILED	14260 N/R	102	188	13
9930		FSC	2	Digital,	Gate				DTL		
	620	N/R	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	3514 N/R	102	188	13
9932		FSC	2	Digital,	Gate				DTL		
	6 20	N/R	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	3883 N/R	102	188	13
7766		NSC	2	Digital,	Gate				DTL		
	020	N/R		N/R 1500 Ohms	100E-12 F	1 N/R	1 FAILED	3444 N/R	102	188	13
5766		NSC	7	Digital,	Flip-Flop				DTL		
	050	₹ X	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	3708 N/R	102	188	13

Part Number (Cont'd) 9945	ਰੇ	Part ESD Mfr Clar	sl s	Part Description Digital, Fl	on Flip-Flop				Technology DTL		I
	Sour 029	Test Test Test Test Source Date Type Resis 029 N/R N/R 1500	Test Type N/R	stance Ohms	Test <u>Capacitance</u> 100E-12 F	Number Date Number Test Pulses Code Devices Resul	비유	Test Voltage Pin Combination 4481 N/R	railure Test <u>Criteria Remarks</u> 102 188	t General larks Remarks 188 13	ral rks 13
9766	6 20	FSC N/R	% % % R 3	3 Digital, Ga N/R 1500 Ohms	Gate 3 100E-12 F	1 N/R	1 FAILED	7970 N/R	DTL 102	188	13
8766	050	FSC N/R 1	3 /R	Digital, Fl 1500 Ohms	Flip-Flop 100E-12 F	1 N/R	1 FAILED	4774 N/R	DTL 102	188	13
AD5216	736	11E 1186 SS	_	Digital, Co 1500 Ohms	Converter, A/D-D/A . 100E-12 F	D/A 9 N/R	2 FAILED	1000 INPUT TO GND	Bipolar 5	252	m
AD558T	392	ANA 1086 SS	_	Digital, Co 1500 Ohms	Converter, A/D-D/A : 100E-12 F	D/A 1 N/R	5 FAILED	450 EACH PIN TO 11 & 12 (+ -)	Bipolar 19	252	13
AD574	927	1186 SS	₩	Digital, Co 1500 Ohms	Converter, A/D-D/A . 100E-12 F	D/A 18 8633	1 PASSED	4000 N/R	Bipolar 5	252	٣
AD581	736	ANA 1186 SS	_	Linear, Vol 1500 Ohms	Linear, Voltage Reference 1500 Ohms 100E-12 F	e 10 8644	2 FAILED	1200 INPUT TO GND	Bipolar 5	252	м
AD584SH	392	ANA 1		Linear, Vol 1500 Ohms	Linear, Voltage Reference 1500 Ohms 100E-12 F	- 1 N/R	S FAILED	1050 EACH PIN TO 8 (+ -)	Bipolar 19	252	13

Part		Part ESD Mfr Class	S	Part Description	_				Technology		
A 2584 TH				ar, Vol	Voltage Reference	nce			Bipolar		}
	Source 436	9)	Test Test Test Date Type Resi 0788 SS 1500	stance Ohms	Test <u>Capacitance</u> 100E-12 F	Number Date Pulses Code 18 N/R	비요	Test Voltage Pin Combination 4000 N/R	Failure Test <u>Criteria Rema</u>	<u>rks</u> 252	General Remarks 3
AD590		ANA	1 Digi	Digital, Co	Converter, A/D-D/A	0-D/A			Bipolar		
	436	1186 SS		1500 Ohms	100E-12 F	12 N/R	2 FAILED	1600 INPUT TO GND	ĸ	252	٣
	736	1186 SS		1500 Ohms	100E-12 F	11 N/R	1 FAILED 2 FAILED	1400 INPUT TO INPUT 1400 INPUT TO OUTPUT	5 5	252 252	мм
	927	1186 SS		1500 Ohms	100E-12 F	1 N/R	1 FAILED	200 INPUT TO INPUT	5	252	М
	927	1186 SS		1500 Ohms	100E-12 F	12 N/R	1 FAILED	1600 INPUT TO INPUT	2	252	٣
	736	1186 SS		1500 Ohms	100E-12 F	15 N/R	3 FAILED	2500 OUTPUT TO INPUT	5	252	M
ADC0800		NSC	1 Digi	Digital, Co	Converter, A/D-D/A	D-D/A			CMOS		
	421	0184 SS		Ohms	1500 Ohms 100E-12 F	3 N/R	1 FAILED	500 PINS 5,6,AND 7	102	252	13
ADC0808CJ		NSC	1 Digi	Digital, Co	Converter, A/D-D/A	D-D/A			Bipotar		
	392	1186 SS		1500 Ohms	100E-12 F	1 N/R	5 FAILED	1050 EACH PIN TO 11 & 13 (+ -)	19	252	13
ADC0811		NSC	2 Digi	Digital, Co	Converter, A/D-D/A	D-D/A			CMOS		
	421	0184 SS		Ohms	1500 Ohms 100E-12 F	11 8436	1 FAILED	2500 PINS 11,15,AND 17-19	102	252	13
ADC0819		NSC	2 Digi	Digital, Co	Converter, A/D-D/A	D-D/A			CMOS		
	421	0184 SS		1500 Ohms	100E-12 F	18 N/R	1 FAILED	3500 PINS 4,9,23,24,AND 26	102	252	13

Part Number (Co	(Cont'd)	Part . Mfr Class	Part se Description	00					100	j	
				l, Conver	Converter, A/D-D/A	D/A			CMOS	, AR	
	Test	: Test Te	Test Test	Test		Number Date Number	Test	Test	Failure	Test Ge	General
	Sour 422	Source Date Type Resistance 422 0184 SS 0 Ohms	pe Resist		Capacitance P	Pulses Code Dev	Devices Result V	Voltage Pin Combination 500 PINS 4,9,23,24, AND 26	- Criteria	Remarks Re 289	Remarks 13
₽ 0C0820		NSC	1 Digital,		Converter, A/D-D/A	D/A			CMOS		
	421	0184 SS	1500 Ohms		100E-12 F	6 N/R	1 FAILED	1200 PINS 6-8, 11-13	102	252	13
	755	0184 SS	0	Ohms 125E	125E-12 F	2 N/R	1 FAILED	350 PINS 6-8, 11-13	102	589	13
ADC0838		JSN	1 Digital,		Converter, A/D-D/A	9/A			CMOS		
	421	0184 SS	1500 Ohms		100E-12 F	4 N/R	1 FAILED	700 PINS 13,16,17,AND 18	102	252	13
	421	0184 SS	1500 Ohms	hms 100E-12	:-12 F	18 N/R	1 FAILED	3500 N/R	102	252	13
AM111		AMD .	1 Linear	Linear, Somoarator	ŤOF						
				1	5				B I DOLGI		
	059	N/R N/R	R 1500 Ohms	hms 100E-12	:-12 F	1 N/R	1 FAILED	611 N/R	102	188	13
AM111		N/R	3 Linear,	Linear, Comparator	itor				Bipolar		
	030	N/R N/R	R 1500 Ohms		100E-12 F	1 N/R	1 FAILED 1 FAILED	11000 N/R 11000 N/R	103	252 252	13
AM26LS29		AMD 2	2 Digital,	_	Line/Bus Driver				LSTTL		
	736	1186 SS	1500 Ohms	hms 100E-12	:-12 F	16 N/R	1 FAILED 1 FAILED	3000 INPUT TO OUTPUT 3000 INPUT TO OUTPUT	2. 5.	252 252	мм
AM261 531		QM Q	10.0	_	revise Driver				-		
				_	io spi				LSIIL		
	436	1186 SS	1500 Ohms	100E-12	-12 F	11 N/R	5 FAILED	1400 INPUT TO GND	5	252	М

Part Number (Cont'd)	G	Part ESD Mfr Class	Part Description	c				Technology	λα	ļ
·			Digital, L	ine/Bus Driver				LSTTL		
	Test	Test Test	Test	Test	Date	Test	Test	Failure Test Criteria Remarks		General Remarks
	200r	Source Date IYPE KESISTANCE 436 1186 SS 1500 Ohms	1500 Ohms	100E-12 F	8 N/R	1 FAILED	900 INPUT TO OUTPUT	5		~
AM26LS32		AMD 1	Digital, L	ine/Bus Receiver	L.			רצנור		
	436	0588 SS	1500 Ohms	100E-12 F	16 N/R	3 FAILED	3000 OUTPUT TO GROUND	5	252	3
	436	1186 SS	1500 Ohms	100E-12 F	14 N/R	1 FAILED	2000 OUTPUT TO GND	\$	252	٣
	436	1186 SS	1500 Ohms	100E-12 F	9 N/R	1 FAILED	1000 INPUT TO GND	\$	252	8
AM26LS33		AMD 1	Digital, L	ine/Bus Receiver	<i>L</i>			LSTTL		
	436	1186 SS	1500 Ohms	100E-12 F	5 8622	1 FAILED	600 INPUT TO GND	5	252	м
AM687		AMD 1	Linear, Comparator	mparator				Bipolar		
	392	1186 SS	1500 Ohms	100E-12 F	1 N/R	5 FAILED	850 EACH PIN TO 6, 11 THEN 3,14	19	145	13
A127C256		ATM 2	Digital, M	lemory, EPROM				CMOS		
	401	0187 SS	1500 Ohms	100E-12 F	S N/R	1 PASSED 1 PASSED		09	288 288	
						1 PASSED 1 FAILED	6200 PIN # 03 (A7),(+V) 3000 PIN # 04 (A6),(+V)	99	288	
						1 PASSED	NI G	09	288	
						1 PASSED	6200 PIN # US (AZ), (+V) 6200 PIN # (09), (+V)	8 9	288	
						1 PASSED 1 PASSED	6200 PIN # 10 (A0),(+V) 6200 PIN # 11 (O0),(+V)	09	288	

Technology	CMOS	Test	Criteria Remarks Remarks 60 288 1			60 288 1	60 288 1	60 288 1			60 288 1	60 288 1	60 288 1	60 288 1						60 288 1										60 288 1	60 288 1	60 288 1			60 288 1
Part Part ESD Part Number (Cont'd) Mfr Class Description	ATM 2	Test Number Date Number Test Test	Source Date Type Resistance Capacitance Pulses Code Devices Result Voltage Pin Combination	1 PASSED 6200 PIN	6200 PIN	1 PASSED 6200 PIN # 16 (04),(+V)	1 PASSED 6200 PIN # 17 (05),(+V)	1 PASSED 6200 PIN # 18 (06),(+V)	1 PASSED 6200 PIN # 19 (07),(+V)	1 PASSED 6200 PIN # 20 (CE),(+V)	1 PASSED 6200 PIN # 21 (A10),(+V)	1 FAILED 3000 PIN # 22 (CE),(+V)	1 FAILED 2800 PIN # 23 (A11), (+V)	1 PASSED 6200 PIN # 24 (A9),(+V)	1 FAILED 2400 PIN # 25 (A8),(+V)	1 FAILED 2400 PIN # 26 (A13),(+V)	PIN#	1 PASSED 6200 PIN # 28 (Vcc),(+V)	1 PASSED 6200 PIN # 01 (Vpp),(-V)	1 PASSED 6200 PIN # 02 (A12),(-V)	1 PASSED 6200 PIN # 03 (A7),(-V)	1 PASSED 6200 PIN # 04 (A6),(-V)	1 PASSED 6200 PIN # 05 (A5),(-V)	90 # NId	PIN # 07	6200 PIN # 08	6500 PIN # 09	1 PASSED 6200 PIN # 10 (A0),(-V)	1 PASSED 6200 PIN # 11 (00),(-V)	1 PASSED 6200 PIN # 12 (01),(-V)	1 PASSED 6200 PIN # 13 (02),(-V)	1 PASSED 6200 PIN # 15 (03), (-V)	1 PASSED 6200 PIN # 16 (04),(-V)	6200 PIN # 17	1 PASSED 6200 PIN # 18 (06),(-V)

Part		Part ESD		Part									
Number (Contid)	ļ	Mfr CI	Class	Description	ion						Technology	λbc	
A1270256			2	Digital,	Memory, EPROM	_					CMOS		[
	Test	Test Test Test Test	Test	Test	Test	Number	Number Date Number	rest	Test	fai	Failure .	Test (General
	Sourc	e Date	Type	Source Date Type Resistance	capacitance	Pulses	Code Devices	ss Result	Voltage Pin Combination	Cri	Criteria	Remarks	Remarks
	101	0187	SS	1500 Ohms	; 100E-12 F	5	N/R	1 PASSED	6200 PIN # 19 (07),(-V)		9	288	-
								1 FAILED	3000 PIN # 20 (CE),(-V)		9	288	-
								1 FAILED	3000 PIN # 21 (A10),(-V)	<u> </u>	9	288	-
								1 PASSED	6200 PIN # 22 (0E),(-V)		9	288	-
								1 PASSED	6200 PIN # 23 (A11),(-V)	•	9	288	-
								1 PASSED	6200 PIN # 24 (A9), (-V)		9	288	-
								1 PASSED	6200 PIN # 25 (A8),(-V)		9	288	
								1 PASSED	6200 PIN # 26 (A13),(-V)	~	9	288	-
								1 PASSED	6200 PIN # 27 (A14),(-V)	^	9	288	-
AT27C512		ATM	5	Digital,	Memory, EPROM	•				Ü	CMOS		
	÷	0187 SS		1500 Ohms	100E-12 F	2	N/R	1 FAILED	2600 PIN # 01 (A15) (+V)	_	9	287	,-
								1 FATIED	70 # NId		7	287	
								1 FA1. FD	DIN # 03		3 4	287	
								י ראוררט	10 ± 11 ±		3 :	0 6	
								1 FAILED	PIN # 04		9	787	-
								1 PASSED	PIN # 05		09	287	-
								1 PASSED	# NId		09	287	-
								1 PASSED	6200 PIN # 07 (A3), (+V)		9	287	-
								1 PASSED	6200 PIN # 08 (A2),(+V)		9	287	-
								1 FAILED	2800 PIN # 09 (A1), (+V)		9	287	•
								1 FAILED	2600 PIN # 10 (A0), (+V)		9	287	-
								1 PASSED	6200 PIN # 11 (00), (+V)		09	287	,
								1 PASSED	6200 PIN # 12 (01), (+V)		9	287	-
								1 PASSED	6200 PIN # 13 (02),(+V)		9	287	-
								1 PASSED	6200 PIN # 15 (03), (+V)		09	287	-
								1 PASSED	6200 PIN # 16 (04), (+V)		9	287	-
								1 PASSEU	6200 PIN # 17 (05), (+V)		90	287	•
								1 PASSED	PIN # 18		09	287	-
								1 PASSED	6200 PIN # 19 (07), (+V)		9	287	-
								1 FAILED	PIN # 20		9	287	-
								1 PASSED	6200 PIN # 21 (A10),(+V)	^	9	287	

		General	Remarks	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	- -	-	-	-	-	-	-	-	-		-	-	-	-	-
<u></u>		Test Ge		287	287	287	287	287	287	287	287	287	287	287	287	287	287	287	287	287	287	287	287	287	287	287	287	287	287	287	287	287	287	287	287	287
Technology	CMOS	Failure Te		09	09	09	09	09	09	09	09	09	09	09	09	09	09	09	09	09	09	09	09	09	09	09	09	09	09	09	09	09	09	09	09	09
		Test	Pin Combi	PIN # 22	PIN # 23	3000 PIN # 24 (A9),(+V)	2600 PIN # 25 (A8),(+V)	2600 PIN # 26 (A13),(+V)	2400 PIN # 27 (A14),(+V)	4200 PIN # 01 (A15),(-V)	PIN # 05	6200 PIN # 03 (A7),(-V)	6200 PIN # 04 (A6),(-V)	6200 PIN # 05 (A5),(-V)	6200 PIN # 06 (A4),(-V)	6200 PIN # 07 (A3),(-V)	PIN # 08	6200 PIN # 09 (A1),(-V)	PIN # 10	PIN # 11	PIN # 13	6200 PIN # 13 (02),(-V)	6200 PIN # 15 (03),(-V)	PIN # 16	6200 PIN # 17 (05),(-V)	6200 PIN # 18 (06),(-V)	6200 PIN # 19 (07),(-V)	PIN # 20	6200 PIN # 21 (A10),(-V)	6200 PIN # 22 (OE/V),(-V)	6200 PIN # 23 (A11),(-V)	6200 PIN # 24 (A9),(-V)	6200 PIN # 25 (A8),(-V)	6200 PIN # 26 (A13),(-V)	PIN # 27	6200 PIN # 27 (A14),(-V)
Part Part ESD Part Number (Contid) Mir Class Description	ATM 2	Test Test Test Test Number Date Number Test To	e Date Type Resistance Capacitance Pulses Code Devices Result	401 0187 SS 1500 Ohms 100E-12 F 5 N/R 1 PASSED	1 FAILED	1 FAILED	1 FAILED	1 FAILED	1 FAILED	1 FAILED	1 PASSED	1 PASSED	1 PASSED	1 PASSED	1 PASSED	1 PASSED	1 PASSED	1 PASSED	1 FAILED	1 PASSED	1 PASSED	1 PASSED	1 PASSED	1 PASSED	1 PASSED	1 PASSED	1 PASSED	1 PASSED	1 PASSED	1 PASSED	1 PASSED	1 PASSED	1 PASSED	1 PASSED	1 PASSED	1 PASSED

Part	Part ESD Part Mfr class Description	Technology		
CD4000A	2	CMOS	ì	
	Test Number Date Number Test Test	Failure Test	Test General	رة عا
	Source Date Type Resistance Capacitance Pulses Lode Devices Result Voltage Pin Combination and M.A. 1500 Ohms 100F-12 F 1 M.R. 1 FAILED 6985 N/R			2] £
	1 FAILED 8010	102		13
	-	102	188	13
C54001	RCA 2 Digital, Gate	CMOS		
	436 0788 SS 1500 Ohms 100E-12 F 16 8739 8 FAILED 3000 INPUT TO COMMON	\$	252	2
CD40028E	RCA 1 Digital, Gate	CMOS		
	416 0586 SS 1500 Ohms 100E-12 F 1 8610 10 FAILED 1030 N/R	25	252	13
CD40068	RCA 1 Digital, Register, Shift	CMOS		
	436 1186 SS 1500 Ohms 100E-12 F 7 8720 1 FAILED 800 INPUT TO OUTPUT	N	252	~
CD4011	RCA 1 Digital, Gate	CMOS		
	414 0783 SS 1500 Ohms 100E-12 F 5 N/R 1 FAILED 700 NEG INPUT,POS OUTPUT 16 FAILED 900 NEG INPUT,POS OUTPUT 12 FAILED 1000 NEG INPUT POS OUTPUT	OUTPUT 102 OUTPUT 102 OUTPUT 102	259 259 259	92 92 92
	FAILED 1100 NEG INPUT, POS		259	26 26
	FAILED 700 ALL		260	97
	9 FAILED 800 ALL	102 102	260 260	% %
	FAILED 1000	102	260	92
	5 FAILED 1100 ALL	V 0	000	0
004011	N/R 1 Digital, Gate	CMOS		
	414 9783 SS 1500 Ohms 100E-12 F 5 N/R 5 FAILED 800 NEG INPUT,POS OUTPUT	JIPUT 102	529	56

		÷ (:			; ! !			Technology CMOS	.9y	
	Ž	The Task Task Task	Í	11	Tost	Number Date Number	Number Test	Test	Failure	Test	General
		20 Pates 2783	्रा इंद्र	Syurce Date Type Resistance	Capacitance	-,,	Devices Result	Voltage	m.	X S	Remarks
	•		ī, ī	<u> </u>		Υ Υ	I FAILED	SOU NEG INPUT, POS OUTPUT	102	259	26
	7	1683	1683 55	1500 Ohms	100£-12 F	5 N/R	11 FAILED	600 NEG INPUT, POS OUTPUT	102	259	56
								700 NEG INPUT, POS OUTPUT	102	259	56
							24 FAILED	800 NEG INPUT, POS OUTPUT	102	259	56
								900 NEG INPUT, POS OUTPUT	102	259	92
								1000 NEG INPUT, POS OUTPUT	102	259	56
							1 FAILED	1100 NEG INPUT, POS OUTPUT	102	259	56
							25 FA:LED	500 ALL	102	260	56
								600 ALL	102	260	56
								700 ALL	102	260	56
									102	260	56
							3 FAILED	900 ALL	102	260	56
							1 FAILED	NEG	102	259	56
								600 NEG INPUT, POS OUTPUT	102	259	56
							15 FAILED	700 NEG INPUT, POS OUTPUT	102	259	26
								NEG	102	259	92
								NEG	102	259	\$
								1100 NEG INPUT, POS OUTPUT	102	529	56
								900 NEG INPUT, POS OUTPUT	102	259	56
							24 FAILED	200 ALL	102	260	56
							29 FAILED	900 ALL	102	260	56
							13 FAILED	700 ALL	102	260	56
							8 FAILED	800 ALL	102	260	56
							3 FAILED	900 ALL	102	260	56
C04011UB		RCA	←	Digital, Ga	ţe						
									SOMO		
	436	0788 SS		1500 Ohms	100E-12 F	12 8742	2 FAILED	1500 OUTPUT TO COMMON	2	252	٣
CD4012UBF		RCA	-	Digital, Ga	te				CMOS		
	436	0788	88	1500 Ohms	100E-12 F	5 8742	S FAILED	600 INPUT TO OUTPUT	v	25.2	٣
									`	7/7	7

Part Number (Cont'd) CD4012UBF	(P)	Part ESD Mfr Class RCA 1		Part <u>Description</u> Digital, Gat	on Gate				i echnology CMOS		1
	Test	Test Test Test Test		St	Test		Test	Test Valtace Die Combination	Failure Test Criteria Remarks	st Gen narks Rem	General Remarks
	Sour 436	Source Date Type		Resistance 1500 Ohms	Capacitance 100E-12 F	15 8742	8742 5 FAILED	2500 INPUT TO GROUND	2	252	M
CD43158		RCA	10	Digital, Re	Register, Shift				CMOS		
	••	9284 ss		1500 ปกกร	100E-12 F	3 N/R	10 FAILED	400 N/R	25	252	13
2040178¢X		RCA	10	Digital, Co	Counter/Divider	,			CMOS		
	6	0185 SS		1500 Ohms	100E-12 F	3 N/R	10 FAILED	2000 N/R	25	252	13
CD+024		RCA	2 Di	Digital, Co	Counter/Divider,	r, Binary			CMOS		
	670	N/R N,	N/R 15	1500 Ohms	100E-12 F	1 N/R	1 FAILED	36281 N/R	102	189	13
	736	0488 SS		1500 Ohms	100E-12 F	17 N/R	5 FAILED	3500 INPUT TO COMMON	5	252	3
CD40248CN		NSC	1 0 1	Digital, Co	Counter/Divider,	r, Binary			CMOS		
	416	1285 S	SS 15	1500 Ohms	100E-12 F	1 N/R	10 FAILED	400 N/R	25	252	13
	417	0386 S	0 SS	Ohms	200E-12 F	4 N/R	5 FAILED	1000 N/R	25	252	13
	416	0486 SS		1500 Ohms	100E-12 F	4 N/R	10 FAILED	1000 N/R	25	252	13
C940248EX		RCA	-	Digital, C	Counter/Divider,	r, Binary			SOWD		
	416	0386	55 15	1500 Ohms	100E-12 F	1 N/R	10 FAILED	1000 N/R	25	252	13
6040308		RCA	3 0	Digital, G	Gate				CMOS		
	436	1136	SS 1	1500 Ohms	100E-12 F	18 8633	1 PASSED	4000 INPUT TO GND	\$	252	٣

Part Number CD40508	Part ESD Part Mfr Class Description RCA 1 Digital, Inverter, Buffer	Technology	ı
	Test Test Test Test Test Number Date Number Test Test Source Date Type Resistance Capacitance Pulses Code Devices Result Voltage Pin Combination 436 1186 SS 1500 Ohms 100E-12 F 13 8633 1 FAILED 1800 INPUT TO GND	Failure Test General Criteria Remarks Remarks 5 252 3	3 st.
CD4051BCN	NSC 1 Digital, Multiplexer 416 0384 SS 1500 Ohms 100E-12 F 3 8312 5 FAILED 400 N/R	CMOS 25 252 13	13
990702	RCA 2 Linear, Switch 436 1186 SS 1500 Ohms 100E-12 F 15 8625 1 FA1LED 2500 INPUT TO GND	252	, m
806907d0	RCA 2 Digital, Inverter, Buffer 436 1186 SS 1500 Ohms 100E-12 F 15 8651 1 FAILED 2500 INPUT TO OUTPUT	CMOS 5 252 3	м
CD40728EX	RCA 1 Digital, Gate 417 0385 SS 0 Ohms 200E-12 F 3 N/R 5 FAILED 1800 N/R	CMOS 25 252 13	13
	416 0485 SS 1500 Ohms 100E-12 F 3 N/R 5 FAILED 1800 N/R	25 252 13	13
CD40728EX	N/R 1 Digital, Gate 416 0584 SS 1500 Ohms 100E-12 F 3 N/R 10 FAILED 1800 N/R	CMOS 25 252 13	13
CD40818Ex	RCA 1 Digital, Gate 416 0185 SS 1500 Jhms 100E-12 F 3 N/R 10 FAILED 2000 N/R	CMOS 25 252 13	<u>2</u>

Part Number (Cont'd)		Part ESD Mfr Class	95	Part Description						Technology	\ b(
CD4081BEX				Digital,	Gate					CMOS		
- 0	Test	Test Test Test Test Source Date Type Resistance	est .	Test		ritance	Number Date Number Test Pulses Code Devises Resul	+	Test Voltade Din Combination	Failure T	Test G	General Remarks
4 61	393	1184 SS	S	1500 Ohms			1 N/R		2500 12(INPUT) 14(VDD)			13
COP370		NSC	-	Digital,	Line	Digital, Line/Bus Driver				SOWO		
্য	421	0184 SS		1500 Ohms		100E-12 F	6 N/R	1 FAILED	1200 N/R	102	252	13
4	422	0184 SS		O Ohms		125E-12 F	1 N/R	1 FAILED	200 N/R	102	289	13
607400		NSC	-)igital,	Proc	Digital, Processing Unit, Central	, Central			SOWO		
4	421	0184 SS		1500 Ohms		100E-12 F	4 N/R	1 FAILED	800 N/R	102	252	13
COP411		NSC	-)igital,	Proc	Digital, Processing Unit, Central	, Central			CMOS		
7	421	0184 SS		1500 Ohms		100E-12 F	5 N/R	1 FAILED	1000 N/R	102	252	13
J	+22	0184 SS		O Ohms		125E-12 F	1 N/R	1 FAILED	200 N/R	102	589	5
COP420		NSC		Digital,	Proc	Processing Unit, Central	, Central			CMOS		
7	421	0184 SS		1500 Ohms		100E-12 F	6 N/R	1 FAILED	1100 N/R	102	252	13
COP420L		NSC	-)igital,	Proc	Digital, Processing Unit, Central	, Central			CMOS		
4	421	0184 SS		1500 Ohms		100E-12 F	5 N/R	1 FAILED	900 N/R	102	252	13
M027d00		NSC	-	Digital,	Proc	Processing Unit, Central	, Central			SOWO		
7	421	0184 SS		1500 Ohms		100E-12 F	5 N/R	1 FAILED	1000 N/R	102	252	13

Technology CM0S	Failure Test Gener Pin Combination Criteria Remarks Remar	U N/R 13 289 13	CMOS	800 N/R 102 252 13	CMOS	1100 N/R 152 13	CMOS	400 N/R 102 252 13	150 N/R 102 289 13	600 N/R 102 252 13	SOWO	1000 N/R 13	SOWN	1800 N/R 13	SOMN	
	= 1 9	i FAILED 100		1 FAILED 80		1 FAILED 110		1 FAILED 40	1 FAILED 150	1 FAILED 600		1 FAILED 1000		1 FAILED 1800		
Part <u>S Description</u> 1 Digital, Processing Unit, Central	Test Number Capacitance Pulses		1 Digital, Processing Unit, Central	1500 Ohms 100E-12 F 4 N/R	1 Digital, Line/Bus Driver	1500 Ohms 100E-12 F 6 N/R	1 Digital, Processing Unit, Central	1500 Ohms 100E-12 F 2 N/R	0 Ohms 125E-12 F 1 N/R	1500 Ohms 100E-12 F 3 N/R	l Digitał, Memory, RAM	1500 Ohms 100E-12 F 5 N/R	l Digital, Gate	1500 Ohms 100E-12 F 9 N/R	l Digital, Gate	
(Cont'd) Mfr Class	Source Date Type Resistance		NSC	421 0184 SS	NSC	421 0184 SS	NSC 1	421 0184 SS	422 0184 SS	421 0184 SS	NSC 1	421 0184 SS	NSC 1	421 0184 SS	NSC 1	
Part Number (C			2557d02		027d00		787d00				867d00		COP920		776d00	

Part	Part ESD Part Mfr Class Description	Technology
CY7C401		NOS
	Number Date Number Test	Failure Test
	Source Date Type Resistance Capacitance Pulses Code Devices Result Voltage 436 1186 SS 1500 Ohms 100E-12 F 16 8701 2 FAILED 3000	VoltagePin CombinationCriteriaRemarks3000GNDTO OUTPUT52523
CY7C403	CYP 2 Digital, Memory	MOS
	436 1186 SS 1500 Ohms 100E-12 F 17 8637 1 FAILED 3500	3500 INPUT TO GND 5 252 3
D2817A	INT 1 Digital, Memory, EAROM, EEPROM	SOWH
	429 N/R GN 0 OHMS 50E-12 F 3 N/R 10 PASSED 600	600 N/R 13 237 13
DAC-08	PRE 1 Digital, Converter, A/D-D/A	Bipolar
	436 1186 SS 1500 Ohms 100E-12 F 14 N/R 1 FAILED 2000	2000 INPUT TO GND 5 252 3
DAC0830	NSC 1 Digital, Converter, A/D-D/A	CMOS
	421 0184 SS 1500 Ohms 100E-12 F 5 N/R 1 FAILED 900	900 PINS 17 AND 19 102 252 13
DAC10	RAY 1 Linear, Operational Amplifier	Bipolar
	437 1083 GN 1500 Ohms 100E-12 F 10 N/R 3 FAILED 2000 3 FAILED 2000 8 PASSED 2000	2000 PINS 2 TO 4 100 252 13 2000 PINS 5 TO 3 100 252 13 2000 PINS 15 TO 3 100 252 13 2000 N/R 100 252 13
DAC1006	NSC 1 Digital, Converter, A/D-D/A	CMOS
	421 0184 SS 1500 Ohms 100E-12 F 3 N/R 1 FAILED 600	600 PIN 16 13 252 13

Part Number DAC1230		Part ESD Mfr Class NSC 1	Part <u>Descripti</u> Digital,	on Converter, A/D-0/A	A/	:		Technology CMOS	17.	1
	Source 421	t Test Tes CCE Date IYP 0184 SS	Test Test Test Date Type Resistance 0184 SS 1500 Ohms	Test <u>Capacitance</u> 100E-12 f	Number Date Number Test Pulses Code Devices Result 5 N/R 1 FAILED		Test Voltage Pin Combination 1000 N/R	Failure Test Criteria Remarks 102 252	sst Gen marks Rem 252	General Remarks 13
02140	436	SIX 1	Linear, Switch 1500 Ohms 1000	witch 100E-12 F	10 N/R	1 FAILED	1200 GND TO OUTPUT	BIFET 5	252	٣
DG184	436	SIX 2	Linear, Switch 1500 Ohms 1000	witch 100E-12 F	17 8722	5 FAILED	3500 SOURCE TO GATE	JFET S	252	м
DG184A	436	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Linear, Switch 1500 Ohms 1008	witch 100E-12 F	7 N/R	1 FAILED	800 VGS TO GND	JFET 5	252	m
DG184A	436	SIL 3	Linear, Switch 1500 Ohms 1000	aitch 100E-12 F	18 N/R	5 PASSED	4000 N/R	JFET 5	252	m
DG187A	392	SIX 1	Linear, Switch 1500 Ohms 1006	vitch 100E-12 F	1 N/R	5 FAILED	2000 EACH PIN TO 4 & 7 (+ -)	JFET 19	252	13
DG201	436	SIX 1 1186 SS 1186 SS	Linear, Switch 1500 Ohms 1000 1500 Ohms 1000	oitch 100E-12 F 100E-12 F	5 N/R 6 N/R	5 FAILED 5 FAILED	600 INPUT TO COMMON AND OUTPUT 700 INPUT TO GND	CMOS 5 5	252	m m

Part Number 06201	(Cont'd)	Part ESD Mfr Class	Part <u>Descript</u> Linear	tion				Technology		
		< 10	, 199111 S					2		
	Test	Test Test Test Test Source Date Type Resis	r Test PRESISTANCE	Test Capacitance	Number Date Number Test Pulses Code Devices Resul	Number Test T Devices Result V	Test Test Result Voltage Pin Combination	Failure Test Criteria Remarks		General Remarks
	436	1186 SS		100E-12 F	N/R		4000 N/R	2		3
	927	1186 SS	1500 Ohms	100E-12 F	5 N/R	1 FAILED	600 INPUT TO OUTPUT	2	252	3
	736	1186 SS	1500 Ohms	100E-12 F	6 N/R	S FAILED	700 INPUT TO GND	\$.52	3
06201		SIL 1	Linear, Sw	Switch				CMOS		
	736	1186 SS	1500 Ohms 100E-12	100E-12 F	5 N/R	5 FAILED	600 INPUT TO VC-)	5	252	M
06201		N/R 1	Linear, Sw	Switch				CMOS		
	030	N/R N/R	1500 Ohms 100E-12	100E-12 F	1 N/R	1 FAILED	1100 N/R	103	252	13
00403		SIX 1	Linear, Sw	Switch				FET		
	927	1186 SS	1500 Ohms 100E-12	100E-12 F	6 8548	2 FAILED	700 INPUT TO GND	5	252	М
5-270		GEN 3	Linear,	Voltage Regulator	or			TTL		
	412	1286 SS	1500 Ohms	100E-12 F	15 N/R	5 PASSED	15000 PIN 1 (GND) +/-	50	252	13
DM28C256	\$	SEO 2	Digital,	Memory, PROM				MOS		
	736	1186 SS	1500 Ohms 100E-12 F	100E-12 F	16 N/R	1 FAILED	3000 INPUT TO OUTPUT	5	252	8
DM74ALS00	00	NSC 1	Digital, G	Gate				Advanced LSITL	LSTTL	
	421	0184 SS	1500 Ohms	100E-12 F	10 N/R	1 FAILED	2000 INPUTS	102	532	13

Part Number DM74ALS138		Fart ESD Wfr Class NSC 2	s 2	Part <u>Description</u> Digital, Decoder	on Decoder					T A A G	Technology. Advanced LSTTL	LSTTL	
	Sour 421	Test Test Test Fest <u>Source Date Type Resistance</u> 421 0184 SS 1500 Ohms	est ype S	Fest Resistance 1500 Ohms	Est Capacitance 100E-12 F		Number Devices	t Test ult Volta LED 32	Test Test Result Voltage Pin Combination FAILED 3200 N/R				General Remarks 13
DM74ALS14		NSC	2 0	Digital, 1	nverter,	Buffer				A	Advanced LiTTL	ויוור	
	421	0184 SS		1500 Ohms	100E-12 F	18 N/R	1 FAILED	ED.	3500 N/R		102	252	13
DM74ALS157		NSC	2 D)igital, ∧	Digital, Multiplexer					Adv	Advanced LSTIL	LSTTL	
	421	0184	SS 1	1500 Ohms	100E-12 F	15 N/R	1 FAILED	ED	3000 N/R		102	252	13
DM74ALS245		NSC	2 D)igital, 1	Digital, Transceiver					Adv	Advanced LSTTL	רפענר	
	421	0184 SS		1500 Ohms	100E-12 F	18 N/R	1 FAILED		3500 N/R		102	252	13
DM74ALS258		NSC	2 0	igital, ⊾	Digital, Multiplexer					Adv	Advanced LSTTL	רצענר	
	421	0184 SS		1500 Ohms	100E-12 F	15 N/R	1 FAILED		3000 N/R		102	252	13
DM74ALS373		NSC	3 D	Digital, Latch	.atch					Adv	Advanced LSTTL	LSTTL	
	125	0184 SS		1500 Ohms	100E-12 F	25 N/R	1 FAILED		5000 N/R		102	252	13
DM74ALS541		NSC	2 D	Digital, L	ine/Bus Driver	ver				Adv	Advanced L3TTL	.377	
	421	0184 SS		1500 Ohms	100E-12 F	13 N/R	1 FAILED		2500 N/R		102	252	13
DM74AS174		NSC	2 D	Digital, Flip-Flop	lip-Flop					Adv	Advanced SIIL	STTL	
	421	0184 SS		1500 Ohms	100E-12 F	18 N/R	1 FAILED		3500 N/R		102	252	13

Part		Part ESD Mfr Cla	ESD	Part Description	c				Technolog/		
DM74AS282	1		2	Digital					Advanced 3TTL	;TTL	
	Test	: Test	Test Test Test	Test		Date	Test		Failure Test		General
	Sour 421	<u>ce</u> <u>Date</u> 0184	SS \$	Resistance 1500 Ohms	Source Date Type Resistance Capacitance F 421 0184 SS 1500 Ohms 100E-12 F	Pulses Code Devices	Result FAILED	Voltage Pin Combination 3500 N/R			Kemarks 13
DM74AS640		NSC	8	Digital, Transceiver	ransceiver				Advanced STTL	3TTL	
	451	0184 SS	SS	1500 Ohms 100E-12 F	100E-12 F	25 N/R	1 FAILED	5000 N/R	102	252	13
DM74LS00		NSC	-	Digital, G	Gate				רצנור		
	421	0184	SS	1500 Ohms	100E-12 F	6 N/R	1 FAILED	1200 N/R	102	252	13
DM74S195		NSC	-	Digital, Re	Register, Shift				STTL		
	421	0184	SS	1500 Ohms	100E-12 F	5 N/R	1 FAILED	900 N/R	102	252	13
DM8820AJ		NSC	-	Digital, L	Line/Bus Receiver	er			Bipolar		
	620	N/R	N/R	1500 Ohms 100E-12	100E-12 F	1 N/R	1 FAILED	1707 N/R	102	188	13
DM933N		NSC	8	Digital, T	imer, Programm	Digital, Timer, Programmable Interval			DTL		
	620	X X	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	6748 N/R	102	188	13
DMPAL16: BANC		NSC	-	Digital, A	Array, PAL				Bipolar		
	127	0184 SS	SS +	1500 Ohms 100E-12 F	100E-12 F	8 N/R	1 FAILED	1600 N/R	102	252	13
DMPAL16L8B2		NSC	2	Digital, A	Array, PAL				Bipolar		
	421		0184 SS	1500 Jhms	100E-12 F	10 N/R	1 PASSED	2000 N/R	102	252	13

Part Number EP8340		Part ESD Mfr Class NSC 1		Part <u>Description</u> Digital, Enc	on Encoder				Bipclar	73	
	Sour 421	Source Date Type Resistant O184 SS 1500	ype R	Test Resistance 1500 Ohms	Test Capacitance 100E-12 F	Number Date Number Test Pulses Code Devices Resu. 10 N/R 1 FAILE	#1.⊜	Test Voltage Pin Combination 2000 N/R	Failure lest <u>Criteria Femarks</u> 102 252		General Remarks 13
DP8341		NSC 1	_	Digital, D	Decoder 12 r	2			Bipolar	;	
DP8+648N	- 7 7	r S S S S S		Digital, C	Controller, Fixed Disk Pulse Det	/ N/K ed Disk Pulse	FAILED	1400 N /R	102 MOS	252	.
77.000	421	0184 SS		S	100E-12 F	2 N/R	1 FAILED	350 PINS 2,3 AND 10	102	252	13
00 A 24 A 20	421	NSC 0184 SS	-	Digital, C 1500 Ohms	Controller, Disk Drive Data 100E-12 F 8 N/R	k Drive Data 8 N/R	1 FAILED	1000 N/R	MOS 102	252	13
0838 96	421	NSC 0184 SS	_	Digital, L 1500 Ohms	Line/Bus Driver 100E-12 F	10 N/R	1 FAILED	2000 N/R	Bipolar 102	252	13
083897	421	NSC 0184 SS		Digital, T 1500 Ohms	Transceiver 100E-12 F	10 N/R	1 FAILED	2000 N/R	Bipolar 102	252	13
058908	421	NSC 1	_	Linear, Ph. 1500 Ohms	Linear, Phase Lock Loop 1500 Ohms 100E-12 F	2 N/R	1 FAILED	400 N/R	Bipolar 102	193	13
:268%	5.	SSA 284		Orgital, L	Digital, Line/Bus Receiver '32의 Ome. 'tafe-12 F	or 13 w/R	1 FAILED	25(1) + 61N B	Bipolar 102	168	13

Part Number	Part ESD Mfr Class					Technol ogy	>	1
HEF4001BTB	sgs 1	Digital, Gate						
	Test Test Test Test	Test	Oate			Failure 16	fest Ger	General
	Source Date Type	Date Type Resistance Capacitance Pulses	Code	Devices Resul. Vo	Voltage Pin Combination			Remarks
	415 0685 SS	1500 Ohms 100E-12 F	3 N/R	10 FAILES	400 N/R	25	252	13
98200+338	\$5.8	Digital, Gate				SUMD		
	→16 0586 SS	1500 Ohms 100E-12 F	3 N/R	10 FA LED	400 N/R	52	252	13
*	* **	Distac, Gate, NAND				SOWO		
	4.5 0685 88	1500 Ohms 100E-12 E	3 N/R	10 FA!LED	4,00 N/R	52	252	51
.92, .**	(6) (6)	Digital, Flip-Flop				SOWO		
	415 0486 SS	1500 Ohms 100E-12 F	3 N/R	3 rAILED	400 N/R	25	252	13
HEF4040BTB	\$68	Digital, Counter/Divider	۷			SOWO		
	416 0785 SS	1500 Ohms 100E-12 F	3 N/R	10 FAILED	400 N/R	25	252	51
нЕF4081ВТ	SGS 1	Digital, Gate				CMOS		
	416 0485 SS	1500 Ohms 100E-12 F	3 N/R	10 FAILED	400 N/R	25	252	13
HEF45208P	\$68	Digital, Counter/Divider	ب			CMOS		
	416 0986 SS	1500 Ohms 100E-12 F	3 N/R	10 FAILED	400 N/R	25	252	13
н1201	HAR	l Linear, Switch				CMOS		
	630 N/R N/R	1500 Ohms 100E-12 F	1 N/R	1 FAILED	2000 N/R	103	252	13

	General Remarks 3		₩	٣	3		٣		m		٣	3	2	٣
75			252	252	252		252		252		252	252	252	252
Technic Logy CMO	Failure Test Criteria Remarks 5 252	SOWO	ir.	CMOS 5	5	CMOS	ις	CMOS	2	CMOS	∑	\$	S	\$
	Voltage Pin Combination 500 INPUT TO GND		CANDELL TO BACK	700 INPUT TO OUTPUT	700 INPUT TO OUTPUT		700 INPUT TO GND		800 INPUT TO GND		800 INPUT TO OUTPUT	600 INPUT TO GROUND	800 INPUT TO GROUND	600 INPUT TO GROUND
	Test Result FAILED		 	2 FAILED	2 FAILED		1 FAILED		FAILED		1 FAILED	1 FAILED	1 FAILED	1 FAILED
	Number Date Number Pulses Code Devices 4 8616		:	5JS 6 N/R	6 N/R	tatic	6 8548		7 N/R	tatic	2 8745	5 8745	7 8745	5 8745
Part Description Digital, Multiplexer	Test <u>Capacitance</u> 100E-12 F	Converter, A/D-B/A			100E-12 F	Digital, Memory, RAM, Static	100E-12 F	етогу	100E-12 F	Digital, Memory, RAM, Etatic	100E-12 F	100E-12 F	100E-12 F	100E-12 F
Part Description Digital, Mu	Test Resistance 1500 Ohms	Digital, C	·	1500 Ohms	1500 Ohms	Digital, M	1500 Ohms	Digital, Memory	1500 Ohms	Digital, M	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms
Part ESD M*F Class HAR 1	lest Test Test Test Source Date Type Resi: 436 1186 SS 1500	(4) (4) (4)		0787.55	1186 SS	101	1186 55	101	1786 SS	101	0788 SS	0788 SS	0788 SS	0788 SS
	Source 436			÷	436		436		436		736	736	436	436
*3*** Number #1508A+8		\$ \$ \$ \$				1016116		10172015008		1016116				

Part Number (Cont'd)		Part ESD Mfr Class	Part Description	č				Technology		ļ
1015116	1		Digital,	nory, RAM,	Static			CMOS		
	Test Source 436	Test Test Test E Date Type Resis 0788 SS 1500	it Test Resistance 1500 Ohms	Source Date Type Resistance Capacitance	Number Date Number Pulses Code Devices 7 8745	Test Result	Test Voltige Pin Combination 300 OUTPUT TO GROUND	Failure Test Criteria Rema	<u>rks</u> 252	General Remarks
	\$Q \$Q †	58 88 50	1500 Ohins	100E-12 F	5 8745	1 FAILED 1 FAILED 1 FAILED 1 FAILED	600 INPUT TO GROUND 600 INPUT TO GROUND 600 INPUT TO GROUND 600 INPUT TO GROUND	~ ~ ~ ~	252 252 252 252	~ ~ ~ ~
	436	0788 SS	1500 Ohms	100€-12 F	2 8745	1 FAILED	800 INPUT TO OUTPUT	25	252	3
	436	0788 SS	1500 Ohms	100E-12 F	5 8745	1 FAILED	600 INPUT TO GROUND	īν	252	8
	÷36	0788 \$\$	1500 Ohms	100E-12 F	9 8745	1 FAILED	1000 INPUT TO GROUND	5	252	3
145216		1SL 1	Digıtal, M	Multiplexer				CMOS		
	736	1186 SS	1500 Ohms	100E-12 F	1 8625	1 FAILED 1 FAILED	200 INPUT TO OUTPUT 200 INPUT TO OUTPUT	2 2	252 252	2 2
1MS-1203		I WW	l Digital, M	Memory, RAM, Static	Static			SOWO		
	525	SS 2870	1500 Ohms	1500 Ohms 100E-12 F	110 N/R	3 FAILED	1250 PINS 5 AND 17	53	252	17
IMS-1223		INM 2	Digital,	Memory, RAM, Static	Static			CMOS		
	527	0487 SS	1500 Ohms	100E-12 F	220 N/R	3 FAILED	4000 PIN 7	53	252	17
1490 IMS-1490		INM	1 Digital, P	Memory, RAM,	Static			NMOS		
	527	0887 SS		1500 Ohms 100E-12 F	110 N/R	3 FAILED	1100 PINS 1 AND 3	53	252	17

Part Number (Co IMS-1400	(Cont'd)	Part ESD Mtr Class INM 1	Part Descript Digital,	HOLY, RAM,	Static			Technology	Х6	
	Test Source	Source Date Type Resistant	st Test	Test Capacitance	Number Date Number Test Pulses Code Devices Resul	<u>#1</u>	Test Voltage Pin Combination	Failure Test <u>Criteria Remarks</u>		General Remarks
	C2*	000		100E - 12 F	140 N/R	3 FAILED	2000 N/R	53	252	17
IMS-1403		INM	Digital, Me	Memory, RAM, S	Statíc			NMOS		
	752	N/R SS	1500 Ohms	100E-12 F	50 N/R	3 FAILED	500 N/R	53	252	17
1MS-1420		I MM	Digital, Me	Memory, RAM, S	Static			SOWN		
	425	1086 SS	1530 Ohms	100E-12 F	110 N/R	3 FAILED	1250 PINS 17 AND 18	ζ,	252	17
	425	1086 SS	1500 Ohms	100E-12 F	140 N/R	3 FAILED	2000 N/R	53	252	17
IMS-1423		INM	Digital, Memory, RAM,		Static			CMOS		
	425	0887 \$\$	1500 Ohms	100E-12 F	80 N/R	3 FAILED	800 PINS 2,4,6,9, AND 11	53	252	17
	425	0887 ss	1500 Ohms	100E-12 F	220 N/R	3 FAILED	4000 PINS 12,13 AND 14	53	252	17
1MS-1600		I W	Digitat, Memory, RAM,		Static			NMOS		
	425	0587 SS	1500 Ohms	100E-12 F	50 N/R	3 FAILED	500 PINS 3,6,8,9,10 AND 19	53	252	17
IMS-1601		EN M	Digital, Me	lemory, RAM, St	Static			NMOS		
	425	0187 SS	1500 Ohms	100E-12 F	70 N/R	3 FAILED	700 1,3,5,6,10, AND 19	53	252	17
	425	0187 ss	1500 Ohms	100E-12 F	220 N/R	3 FAILED	6 NIG 0007	53	252	17
IMS-1620		I NM	Digital, Memory, RAM,	mory, RAM, St	Static			NMOS		
	527	0187 SS	1500 Ohms	100E-12 F	90. N/R	3 FAILED	900 PINS 3 AND 13	53	252	17

Part			;	Part	í				Technology		
Number 1MS-1624		INM THE		Digital, Me	Digital, Memory, RAM,	Static			NMOS		}
	Source 255	lest Test Test Test Source Date Type Resistant 425 1187 SS 1500		Test Resistance 1500 Ohms	Test Capacitance 100E-12 F	Number Pulses 110		Test Test Result Voltage Pin Combination FAILED 1250 PINS 4,5,6,7,9,10,13,19,23	Failure Tost Criteria Remar 53	252	General Remarks 17
1MS-1625		Σ×	-	Digital, M	Digital, Memory, RAM, Static	Static			NMOS		
	÷25	1187 SS		1500 Ohms	100E-12 F	100 4/R	3 FAILED	1000 PINS 3,12, AND 20	53	252	17
IMS-1630		Σ	-	Digital, M	Digital, Memory, RAM,	, Static			NMOS		
	527	1187 S	SS	1500 Ohms	100E-12 F	100 N/R	3 FAILED	1000 PINS 7,23,25, AND 27	53	252	17
	425	1187 SS		1500 Ohms	100E-12 F	220 N/R	3 FAILED	4000 PINS 11,12,13,16,17,18,19	53	252	17
IMS-1800		NN I	-	Digital, M	Digital, Memory, RAM,	, Static			SOMN		
	425	1097 SS		1500 Ohms	100E-12 F	120 N/R	3 FAILED	1500 SEE REMARKS	53	268	17
1MS-2600		I NM	2	Digital, M	Digital, Memory, RAM,	, Dynamic			NMOS		
	425	1187 SS		1500 Ohms	100E-12 F	180 N/R	3 FAILED	3000 PIN 12	53	252	17
IMS-A100		Σ̈́	-	Digital					CMOS		
	425	SS 2870	SS	1500 Ohms	100E-12 F	100 N/R	3 FAILED	1000 ALL	53	252	1,
1M>-C004		Σ	-	Digital					CMOS		
	425	0.487 \$\$	53	1500 Ohms	100E-12 F	120 N/R	3 FAILED	1500 PIN 26 AND 58	53	252	17

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148-C011			Digital					Technology	97	{
								SOWO		
	Test	t Test Test Test	it Test	Test	Number Date Number	Test	Tost	railure T	Test Go	General
	200	ce Date IVP	Source Date Type Resistance	Capacitance	Code	Devices Result V	Voltage Pin Combination	Criteria R	Remarks Re	Remarks
	425	0887 88	1500 Ohms	100E-12 F	110 N/R		1250 PIN 4	53		17
	425	0387 SS	1500 Ohms	100E-12 F	120 N/R	3 FAILED	1500 PINS 15-20	53	252	17
	425	0887 88	1500 Ohms	100E-12 F	220 N/R	3 FAILED	4000 N/R	53	252	17
IMS-C012		EN I	Digital					MOS		
	425	0887 ss	1500 Ohms	100E-12 F	110 N/R	3 FAILED	1250 PIN 4	53	252	17
	425	0887 ss	1500 Ohms	100E-12 F	120 N/R	3 FAILED	1500 PINS 15-20	53	252	17
	455	0887 ss	1500 Ohms	100E-12 F	220 N/R	3 FAILED	4000 N/R	53	252	17
IMS-6171		I NM 2	Digital					SOWO		
	425	0188 SS	1500 Ohms	100E-12 F	150 N/R	3 FAILED	2250 PIN 16	53	252	17
1MS-1800		I NM 3		Digital, Processing Unit, Central	, Central			NMOS		
	455	0287 ss	1500 Ohms	100E-12 F	220 N/R	3 PASSED	4000 N/R	53	252	17
1NS8050		NSC 1	Digital, Pr	rocessing Unit, Central	, Central			MOS		
	127	0184 SS	1500 Ohms	100E-12 F	10 N/R	1 FAILED	2000 N/R	102	252	13
INS82C50		NSC 1	Digital, Pro	Digital, Processing Unit, Central	, Central			CMOS		
	421	0184 SS	1500 Ohms	100E-12 F	8 N/R	1 FAILED	1500 N/R	102	252	13

Part		Part ESD Mfr Class	Part					Technology		ı
LF11202			Linear, Switch	itch				FET		
	Test	Test Test Test			Number Date Number Test		Test Mattaga Din Combination	Failure Test Criteria Reman	ş	General Remarks
	50urce 436	1186 SS	1500 Ohms	100E-12 F	18 N/R	5 PASSED	4000 N/R	5		3
	436	1186 SS	1500 Ohms	100E-12 F	11 N/R	1 FAILED	1400 INPUT TO OUTPUT	5	252	ĸ
	736	1186 SS	1500 Ohms	100E-12 F	16 N/R	1 FAILED	3000 INPUT TO GND	5	252	2
LF11202D		NSC 2	Linear, Switch	itch				FET		
	736	1186 SS	1500 Ohms	100E-12 F	16 N/R	5 FAILED	3000 INPUT TO GND	5	252	2
	436	1186 SS	1500 Ohms	100E-12 F	15 N/R	5 FAILED	2500 INPUT TO GND	5	252	~
LF155		1 110 1	Linear, Op	berational Amplifier	ifier			BIFET		
	438	0587 GN	1500 Ohms	100E-12 F	10 N/R	8 FAILED	2000 IN TO V(-)	55	252	13
LF155A		רבכ 1	Linear, Op	Linear, Operational Amplifier	ifier			BIFET		
	827	0587 GN	1500 Ohms	100E-12 F	10 N/R	9 FAILED	2000 IN "O V(-)	55	252	13
LF156		LTC N		Linear, Operational Amplifier	ifier			BIFET		
	542	N/R SS	100 Ohms	N/R	1 N/R	15 FAILED	169 INPUT(+) INPUT(-)	27	186	21
	436	1186 SS	1500 Ohms	100E-12 F	18 N/R	1 PASSED	4000 N/R	5	252	3
LF156A		ר 10	Linear, Op	Linear, Operational Amplifier	ifier			BIFET		
	738	1185 GN	1500 Ohms	100E-12 F	10 N/R	8 FAILED	2000 INPUT TO V(-)	55	252	13

Part Number LF157		Part ESD Mfr Class		Part Description Linear, Operational Amplifier				Technology B1FET	78	1
	Source	t Test	Test	auce	Number Date Number Pulses Code Devices		Test Test Result Voltage Pin Combination	Failure To	Test Ger Remark <u>s</u> Rem	General <u>Re</u> marks
	080	N/R N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	6000 N/R	103		13
LF198		NSC 2	2 Linear, Oper	Linear, Operational Amplifier, Sample and Hold	er, Sample and	Hold		BIFET		
	421	0184 SS	1500 Ohms 1	100E-12 F	15 N/R	1 FAILED	3000 PIN 8	102	252	13
LF198A		LTC 1		Linear, Operational Amplifier, Sample and Hold	er, Sample and	Hold		BIFET		
	436	1186 SS	1500 Ohms 1	100E-12 F	7 N/R	1 FAILED	800 N/R	5	252	٣
LF198AH		1 11	Linear, Oper	Linear, Operational Amplifier, Sample and Hold	er, Sample and	Hold		Bipolar		
	438	0285 GN	1500 Ohms 1	100E-12 F	10 N/R	5 FAILED	2000 IN TO V(-), CH TO V(-)	55	252	13
LF298		NSC 2		Linear, Operational Amplifier, Sample and Hold	er, Sample and	Hold		BIFET		
	421	0184 SS	1500 Ohms 1	100E-12 F	20 N/R	1 FAILED	4000 PIN 8	102	252	13
LF353		NSC 1		Linear, Operational Amplifier	د د			JFET		
	451	0184 SS	1500 Ohms 1	100E-12 F	7 8424	1 FAILED	1400 PINS 2,3,5, AND 6	102	252	13
LF356		N/R 1	Linear					JFET		
	421	0184 SS	1500 Ohms 10	100E-12 F	6 N/R	1 FAILED	1200 PINS 2 AND 3	102	252	13
LF357		NSC 1	Linear					JFET		
	421	0184 SS	1500 Ohms 10	100E-12 F	6 N/R	1 FAILED	1200 PINS 2 AND 3	102	252	13

Part Number		Part Es	ESD	Part Description	c				Technology		1
LF398			7	Linear, Op	perational Ampl	Linear, Operational Amplifier, Sample and Hold	and Hold		JFET		
	lest		Test Test Test	Test	Test	Number Date Number	Test	Test	Failure Test		General
	Sour	ce Date	Type	Resistance	Capacitance	Pulses Code Devi	ices Result Vo	ombination	Criteria Remarks	arks Rem	Remarks
	121	0184	SS	421 0184 SS 1500 Ohms	100E-12 F	20 8512	1 FAILED	4000 PIN 8	102	252	13
LF412		NSC		Linear, Op	Linear, Operational Amplifier	ifier			JFET		
	421	0184 SS	SS	1500 Ohms	100E-12 F	4 N/R	1 FAILED	800 PINS 2,3,5, AND 6	102	252	13
1571		S. S.	,	Linear, C	Derational Amplifier	ifier			JFET		
- - - -					-				,	!	!
	421	0184	SS	1500 Ohms	100E-12 F	3 8416	1 FAILED	600 PINS 2 AND 3	102	252	13
LF442		NSC	•	Linear, Op	perational Amplifier	ifier			JFET		
									,	1	!
	421	0184 SS	SS	1500 Ohms	100E-12 F	2 8440	1 FAILED	1000 PINS 2,3,5, AND 6	102	252	13
LH0033		220	-	Digital, M	Multivibrator				Bipolar		
	392	1186 SS	SS	1500 Ohms	100E-12 F	1 N/R	5 FAILED	650 EACH PIN TESTED TO 10 & 12	6	145	13
LH0070-2H		LTC	7	Linear,	Voltage Reference	9;			Bipolar		
	438	0285 GN	3	1500 Ohms	100E-12 F	10 N/R	15 PASSED	2000 N/R	55	252	13
LH2101A		816	-	Linear, Op	Operational Amplifier	lifier			Bipolar		
	392		SS 9860	1500 Ohms	100E-12 F	1 N/R	5 FAILED	2000 EACH PIN TO 1,6 & 9 (+ -)	9	252	13
LH2108A		LTC	2	Linear,	Operational Amplifier	lifier			Bipolar		
	738		1185 GN	1500 Ohms	100E-12 F	10 N/R	15 PASSED	2000 N/R	55	252	13

Part Number		Part ESD Mfr Class	Part Description	ע				Technology	,	
LH2108AD		LTC 2	Linear,	Operational Amplifier	fier			Bipolar		1
	Test	t Test Test Test	t Test	Test	Date	Test				General
	438	438 0385 GN	1500 Ohms	Lapacitance 100E-12 F	Pulses Code Dev 10 N/R	Devices Result V	Voltage Pin Combination 2000 N/R	Criteria Re	Remarks Remarks 252	Remarks 13
LM101A		FSC 1	Linear,	Operational Amplifier	fier			Bipolar		
	736	1186 SS	1500 Ohms	100E-12 F	14 N/R	5 FAILED	2000 INPUT	\$	252	8
	957	1186 SS	1500 Ohms	100E-12 F	18 N/R	5 PASSED	4000 N/R	2	252	8
	736	1186 SS	1500 Ohms	100E-12 F	14 N/R	S FAILED	2000 OUTPUT TO GND	5	252	М
	736	1186 55	1500 Ohms	100E-12 F	15 N/R	5 FAILED	2500 INPUT TO OUTPUT	5	252	23
	436	1186 SS	1500 Ohms	100E-12 F	18 N/R	5 PASSED 5 PASSED	4000 N/R 4000 N/R	2 2	252 252	m m
LM101A		NSC 3		Linear, Operational Amplifier	fier			Bipolar		
	436	0788 SS	1500 Ohms	100E-12 F	18 N/R	5 PASSED	4000 N/R	2	252	٣
	436	05 88 SS	1500 Ohms	100E-12 F	18 N/R	5 PASSED 5 PASSED	4000 N/R 4000 N/R	~ ~	252 252	м м
	436	1186 SS	1500 Ohms	100E-12 F	18 N/R	3 PASSED	4000 N/R	2	252	8
LM101АН		1 110	Linear, Ope	Operational Amplifier	fier			Bipotar		
	438	0385 GN	1500 Ohms	100E-12 F	10 N/R	9 FAILED	2000 IN TO V(-), IN TO OUT	55	252	13
LM103		NSC 3	Linear, Vol	oltage Regulator				Bipotar		
	020	N/R	N/R 1500 Ohms	100E-12 F	1 N/R	1 FAILED	6152 N/R	102	188	13

1	General Remarks 13	m		13	23		٣		M		8	2	Μ	M
		252		252	252		252		252		252	205	252	252
Technology Bipolar	Failure Test Criteria Remarks 102 188	Bipolar 5	Bipolar	102	5	Bipolar	\$	Bipolar	\$	Bipolar	\$	5	ī.	5
	Number Test Test Devices Result Coltage Pin Combination 1 FAILED 11040 N/R	3000 INPUT TO COMMON		2000 PIN 1	4000 N/R		4000 N/R		3000 INPUT TO GND		4000 N/R	2500 INPUT	3000 INPUT TO INPUT	4000 N/R
	umber Test Te evices Result NG 1 FAILED	2 FAILED		1 FAILED	5 PASSED		1 PASSED		1 FAILED		1 PASSED	18 FAILED	1 FAILED	1 PASSED
00	Number Date Number Test Pulses Code Devices Resu	or 16 8707	lifier	10 N/R	18 N/R	lifier	18 N/R	lifier	16 N/R	olifier	18 N/R	15 N/R	16 N/R	18 N/R
Part <u>Description</u> Linear, Voltage Regulator	Test <u>Capacitance</u> 100E-12 F	Linear, Voltage Regulator 1500 Ohms 100E-12 F	Linear, Operational Amplifier	100E-12 F	100E-12 F	perational Amplifier	100E-12 F	Linear, Operational Amplifier	100E-12 F	perational Amplifier	100E-12 F	100E-12 F	100E-12 F	100E-12 F
Part <u>Description</u> Linear, Vol1	Test Resistance 1500 Ohms	Linear, Vol 1500 Ohms	Linear, Ope	1500 Ohms	1500 Ohms	Linear, Ope	1500 Ohms	Linear, Ope	1500 Ohms	Linear, C	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms
Part ESD Mfr Class NSC 3	Test Date N/R	NSC 2	NSC 1	0184 SS	1186 SS	LTC 3	1186 SS	FSC 2	1186 SS	FSC 2	0788 SS	1186 SS	1186 SS	1186 SS
(Cont'd)	Test Source 029	736		125	436		736		739		736	927	736	736
Part Number LM103		LM105H	LM108			LM108		LM108		LM108A				

Part Number	(Cont'd)	Part ESD Mfr Class	Part <u>Description</u>	Č				yao loodoo I	Ž	
LM103A				Linear, Operational Amplifier	lifier			Bipotar	2	
	Test	Test Tes	Test Test Test Source Date Type Resistance	Test Capacitance	Number Date Number Pulses Code Davios	Test	Test			General
	436	1186 SS	1500 Ohms	100E - 12 F	N/R	1 FAILED	3000 INPUT TO INPUT	Criteria R	Remarks 3 252	Remarks 3
	436	1186 SS	1500 Ohms	100E·12 F	18 N/R	1 PASSED	4000 N/R	ī,	252	1 03
	736	1186 SS	1500 Ohms	130E-12 F	16 N/R	1 FA11 FD	3000 SAPER TO MORE	ם ר	262	۰ ،
						5 FAILED 1 FAILED	3000 INPUT TO GND 3000 +/- INPUT	, v, ic	252	0 M M
LM108A		SN		inear Operational Amplifica)
				erational Ampl	-1-1-e-			Bipolar		
	736	1186 SS	1500 Ohms	100E-12 F	18 N/R		4000 N/R	5	252	3
						1 FAILED 1 FAILED	4000 INPUT TO COMMON	v. v.	252	~ "
							4000 N/R	י יט	252	n m
						9 PASSED	4000 N/R	\$	252	~
LM10H		LTC 1	Linear, Ope	Linear, Operational Amplifier	ifier			Bipolar		
	438	0285 GN	1500 Ohms	100E-12 F	10 N/R	3 FAILED	2000 REF. F/B TO REF. OUT	55	252	13
LM11		NSC 1	Linear, Ope	Linear, Operational Amplifier	ifier			Bipolar		
	÷21	0184 SS	1500 Ohms	100E-12 F	10 8420	1 FAILED	2000 PINS 1 AND 8	102	252	13
LM110 н		NSC 3	Linear, Vol	tage Fol.ower				Bipolar		
	436	1186 SS	1500 Ohms	100E-12 F	18 N/R	1 PASSED 5 PASSED	4000 N/R 4000 N/R	2 2	252 252	мм

Part Number LM117H		Part ESD Mfr Class NSC 1		Part <u>Description</u> Linear, Voltage Regulator				Technology Bibolar	7.7	1
	Test Source	Test Date	Test Test Type Resistance	lest Capacitance	Number Date Number Pulses Code Devises	Test	Test Volence Din Combination	Failure Test		General
	736	1186	1500 Ohms	100E - 12 F	N/R	1 FAILED	1800 INPUT TO INPUT	Criteria Kemarks 5 252		Remarks 3
LM117H		LTC 1	Linear, Vo	Linear, Voltage Regulator				Bipolar		
	736	1186 SS	1500 Ohms	100E-12 F	14 N/R	1 FAILED	2000 INPUT TO INPLT	5	252	8
	438	0986 GN	1500 Ohms	100E-12 F	10 N/R	9 FAILED	2000 ADJ. TO VOUT, ADJ. TO VIN	55	252	13
EM117K		1 110	Linear, Vo	Linear, Voltage Regulator				Bipolar		
	438	1286 GN	1500 Ohms	100E-12 F	10 N/R	8 FAILED	2000 ADJ. TO VIN, ADJ. TO VOUT	55	252	13
L#118		NSC 1	Linear, Op	Linear, Operational Amplifier	ier Ier			Bipolar		
	717	0883 SS	1500 Ohms	100E-12 F	5 N/R	25 FAILED 16 FAILED 16 FAILED 25 FAILED	2000 NEG INPUT, POS OUTPUT 2250 NEG INPUT, POS OUTPUT 2750 NEG INPUT, POS OUTPUT 3000 NEG INPUT, POS OUTPUT	102 102 102 102	259 259 260 260	56 26 26 26 26
	421	0184 SS	1500 Ohms	100E-12 F	11 N/R	1 FAILED	2100 PINS 2 AND 3	102	252	13
	436	1186 SS	1500 Ohms	100E-12 F	18 N/R	1 PASSED 5 PASSED	4000 N/R 4000 N/R	5 5	252 252	2 3
LM118		LTC 1	Linear, Ope	Linear, Operational Amplifier	ier			Bipolar		
	436	1186 SS	1500 Ohms	100E-12 F	15 N/R	5 FAILED	2500 INPUT TO INPUT	5	252	~
	736	1186 SS	1500 Ohms	100E-12 F	1 N/R	5 FAILED	200 OUTPUT TO GND	\$	252	r

Part	Part ESD Part Mfr Class Description	Technology
LM119H	3	Bipolar
	Test Number Date Number Tast	Failure Tes:
	Source Date Type Resistance Capacitance Pulses Code Devices Risult Voltage Pin. 434 1184 SS 1500 Ohms 100F-12 F 18 N/R 1 PASSED 4,000 N/R	Voltage Pin Combination Criteria Remarks Remarks Anno NZR 5 252 3
гм120н	FSC 3 Linear, Voltage Regulator	Bipolar
		\$
	1 PASSED 4000 N/R	5 252
LM120H-12	FSC 2 Linear, Voltage Regulator	Bipotar
	390 N/R GN 1500 Ohms 100E-12 F 5 N/R 1 PASSED 2000 S/R	R 105 247 11
LM120H-15	FSC 2 Linear, Voltage Regulator	Bipolar
	390 N/R GN 1500 Ohms 100E-12 F 5 N/R 1 PASSED 2000 S/R	R 105 247 11
LM120K-05	FSC 2 Linear, Voltage Regulator	Bipolar
	390 N/R GN 1500 Ohms 100E-12 F 5 N/R 1 PASSED 2000 S/R	R 105 247 11
LM120K-12	FSC 2 Linear, Voltage Regulator	Bipolar
	390 N/R GN 1500 Ohms 100E-12 F 5 N/R 1 PASSED 2000 S/R	R 105 247 11
LM1211	NSC 1 Linear	Bipolar
	421 0184 SS 1500 Ohms 100E-12 F 6 N/R 1 FAILED 1200 PINS	1200 PINS 9 AND 10 102 252 13
LM123K	LTC 2 Linear, Operational Amplifier	Bipolar
	438 0285 GN 1500 Ohms 100E-12 F 10 N/R 15 PASSED 2000 N/R	R 55 252 13

Part Number LM124		Part ESD Mfr Class FSC 1		Part Description Linear, Operational Amplifier	fier			Technology Bipolar	, , , , , , , , , ,	
	Source 436	t Test Test Test Ce Date Type Resistant 1186 SS 1500	Test Test Test Date Type Resistance 1186 SS 1500 Ohms		Number Date Number Test Pulses Code <u>Devices Resul</u> 7 8620 5 FAllE	mber Test vices Result 5 FAILED	Test Number Date Number Test Test Capacitance Pulses Code Devices Result Voltage Pin Combination 130E-12 F 7 8620 5 FAILED 800 INPUT TO COMMON	Failure Test Criteria Remarks 5 252	Test 3e Remarks 3e 252	seneral <u>Remarks</u>
	736	1186 SS	1500 Ohms	100E-12 F	4 8620	S FAILED	500 INPUT TO INPUT	5	252	m
LМ129AH		LTC 2		Linear, Voltage Regulator				Sipot a		
	438	0285 GN	1500 Ohms	100E-12 F	10 N/R	15 PASSED	2000 N/R	Ŕ	4.	. *
LM134H		110 2	Linear					Bipotar		
	438	0285 GN	1500 Ohms	100E-12 F	10 N/R	15 PASSED	2000 N/R	5.3	252	13
LM137H		110 2		Linear, Voltage Regulator				Bipolar		
	738	0587 GN	1500 Ohms	100E-12 F	10 N/R	15 PASSED	2000 N/R	55	252	13
LM137K		רעכ 1		Linear, Voltage Regulator				Bipotar		
	438	0587 GN	1500 Ohms	100E-12 F	10 N/R	5 FAILED	2000 ADJ. TO VIN,ADJ. TO VOUT	55	55-	13
LM139		RAY 1	Linear, Comparator	mparator				Bipolar		
	436	1186 SS	1500 Ohms	100E-12 F	14 N/R	1 FAILED	2000 OUTPUT TO GND	iv.	252	٣
LM139		FSC 1	Linear, Comparator	mparator				Bipolar		
	927	0788 SS	1500 Ohms	100E-12 F	18 N/R	5 PASSED	4000 N/R	\$	252	٣

, [(Cont'd)		ESD	Part Description					Technology		I
LM139		FSC	-	Linear, Comparator	parator				Bipolar		
	Test		Test Test Test	Test		Number Date Number	Test	Test	failure Test		General
	Source 436	118	Date Type 1186 SS	Resistance 1500 Ohms	Cap citance Pulses 100: -12 F 10	es Code Devices 10 N/R 1	Result FAILED	Voltage Pin Combination 1200 INPUT TO GND	Criteria Rem 5	Remarks Rem 252	Remarks 3
LM139A		NSC	-	Linear, Comparator	parator				Bipolar		
	739	1186	SS 9	1500 Ohms	100E-12 F	6 8712	§ FAILED	700 INPUT TO COMMON	5	254	м
	736		1186 SS	1500 Ohms	100E-12 F	7 8712 5	5 FAILED	800 INPUT TO COMMON	ν.	86	٣
H071 % 3		FSC	8	Linear, Voli	Linear, Voltage Regulator				Bipolar		
	736	1186	ss 9	1500 Ohms	100E-12 F	18 8632 1	1 PASSED	4000 N/R	\$	252	٣
LM140H-05		FSC	M	Linear, Vol	Linear, Voltage Regulator				Bipotar		
	436	0788	. 8 SS	1500 Ohms	100E-12 F	18 N/R 1	1 PASSED	4000 N/R	\$	252	8
LM140H-05		N/R	~	Linear, Vol	Linear, Voltage Regulator				Bipolar		
	030	N/R	N/N	1,00 Ohms	100E-12 F	1 N/R	1 FAILED	10000 N/R	103	252	13
LM140K-05		FSC	~		Linear, Voltage Regulator				Bipolar		
	390	R/R	N _S	1500 Ohms	100E-12 F	5 N/R 1	1 PASSED	2000 S/R	105	242	Ξ
(M140K-05		N/R	2	Linear, Vol	Linear, Voltage Regulator				Bipolar		
	030	₹/	W/8	1500 Ohms	100E-12 F	1 N/R	1 FAILED	10000 N/R	103	252	13

Part			·	Part Description	uōi				Technology	>	
21- ¥61-182		FSC	2	Linear, V	Voltage Regulator				Bipolar		1
	Test Source 390	t Test rce Date N/R	Test Test Test Date Type Resi N/R GN 1500	Source Date Type Resistance 390 N/R GN 1500 Ohms	Test <u>Capacitance</u> 100E-12 F	Number Date Number Test Pulses Code Devices Resul 5 N/R 1 PASSE	4 0	Test Voltage Pin Combination 2000 S/R	Failure Test Criteria Remar 105	-ks	General Remarks 11
LM140K-12		N/R	ĸ	Linear, V	oltage Regulator				Bipolar		
	030	N/R	N/N	N/R 1500 Ohms	. 100E-12 F	1 N/R	1 FAILED	10000 N/R	103	252	13
LM140K-15		α «	М	Linear, V	linear, Voltage Regulator				Bipolar		
	030	N/R	N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	10000 N/R	103	252	13
LM140K-2.4		FSC	7 2	Linear, V	Linear, Voltage Regulator				Bipolar		
	390	N/R	NS	1500 Ohms	100E-12 F	5 N/R	1 PASSED	2000 s/R	105	247	7
LM140K-24		N/R	3	Linear, Vo	Linear, Voltage Regulator				Bipolar		
	030	a / z		SW40 005.	100E-12 F	1 N/R	1 FAILED	10000 N/R	103	252	13
LM148		FSC	۲.	Linear, Op	Linear, Operational Amplifier	fier			Bípolar		
	436	1186 SS		1500 Ohms	100E-12 F	13 N/R	1 FAILED	1800 INPUT TO INPUT	\$	252	m
	736	1186 SS		1500 Ohms	100E-12 F	18 N/R	1 PASSED	4000 N/R	5	252	М
LM1822		NSC	٠٠	Linear					Bipolar		
	421	0184 SS		1500 Ohms	100E-12 F	2 N/R	1 FAILED	400 PIN 12	102	252	13

1.00	553	•				Technology	>	
1, 1, 2, 3, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4,	VSC CLASS	- 100 de				Bipotar]	1
	180, 180, 190, 190,	, , , , ,	Number Date Number	Test	Test	failure Test		Generat
	. See east east east s	Capacitance	Code	Resurt	Voltage Pin Compination	Criteria Re	Remarks Re	Remarks
	SETO (C.) 88 481.	100E-12 F	8/2	FAILED	833 PIN 12,14,17, AND 22	102	252	13
7. 7. 1. 20.	6.	umean, Spenationa. Ambirther	-f.			Bipolar		
	CC. 10 588. 084	100 0ms 100E-12 F	10 N/R	15 PASSED	2000 N/R	55	252	13
1/ 1/ 2)		Sigital, Mustiwiphaton				Bipolar		
	88 +8. T	1500 0004 1008-12 6	3 N/R	; FAILED	600 PINS 1 AND 2	102	252	13
**************************************	755	, g				Bipotar		
	[05, 88 +3.] .2+	1503 Ohms 1885-12 F	3 N/R	1 FAILED	6 NI d 009	102	251	13
₹ <u>0</u>	18:0 : 38*	Digital, Transceiver				Bipolar		
	??\$. SS →6.? .?-	.533 0rms 100E-12 F	7278 T	1 FAILED	800 PIN 5 AND 17	102	252	13
(† (†) (a) (*)	4SC 3 Linear	L. go				Bipolar		
	-21 0184 SS 1500	1500 Ohms 100E-12 F	58 N/R	1 FAILED	11500 PIN 9	102	252	13
10	SULT . 284	Lingar, Combarator				bipotar		
	1.51 - 88 981 268	1510 0194 1008-12 8	α 	8 FAILED	(+ +) 8 % + C1 N14 H26 (4 +)	9	252	13
3	¥. 7 €	esupuejeg ebts () "uteu."	91			Sipolar		
	1 m	4 2 . 900 . 540 005.	α′ 2 	1 FA:LED	3000 FTM *	102	252	13

Part Number LM199AH	Part ESD Part Mtr Class Description LTC 2 Linear, Comparator	Technology	
	Jost Test Test Test Number Date Number Test Test Source Date Type Resistance Capacitance Pulses Code Devices Result Voltage Pin Combination 438 0385 GV 1500 Ohms 100E-12 F 10 N/R 15 PASSED 2000 N/R	Failure Test General Criteria Remarks Remarks 55 252 13	~ sir
HOOLWI	NSC 3 Linear, Vo	Bipolar	
	436 1186 SS 1500 Ohms 100E-12 F 18 8609 2 PASSED 4000 N/R	5 252 3	~
LM285	NSC 1 Linear, Voltage Reference	Bipolar	
	421 0184 SS 1500 Ohms 100E-12 F 10 N/R 1 FAILED 2000 N/R	102 252 13	••
	422 0184 SS 0 Ohms 125E-12 F 1 N/R 1 FAILED 200 N/R	102 289 13	
LM2889	NSC 1 Linear	Bipolar	
	421 0184 SS 1500 Ohms 100E-12 F 3 N/R 1 FAILED 500 PINS 10 AND 11	0 AND 11 102 251 13	
0062 W 7	NSC 1 Linear, Operational Amplifier	Bipolar	
	421 0184 SS ,500 Ohms 100E-12 F 10 N/R 1 FAILED 2000 N/R	102 252 13	
LM2930	NSC 3 Linear, Voltage Regulator	Bipolar	
	421 0184 SS 1500 Ohms 100E-12 F 40 8421 1 FAILED 8000 N/R	102 252 13	
LM2931	NSC 2 Linear, Voltage Regulator	Bipotar	
	421 0184 SS 1500 Ohms 100E-12 F 18 N/R 1 FAILED 3500 PIN 1	102 252 13	

Part Number LM2935		Part ESD Mfr Class NSC 1		Part <u>Description</u> Linear, Voltage Regulator				Technology Bipolar		ı
	Test Sour	Test Test Test Test Source Date Type Resis	Test Test Test Source Date Type Resistance	Test Capacitance	Number Date Number Test	듸	Test Voltage Pin Combination		şlş	General Remarks
	425	0184 SS	O Ohms	125E-12 F	7 / X / X	1 FAILED	200 N/R	102	687	5
LM305		NSC 1	1 Linear, Vo	oltage Regulator				Bipolar		
	421	0184 SS	1500 Ohms	100E-12 F	9344	1 FAILED	1200 PIN 6	102	252	13
LM309		NSC 2	2 Linear, Vo	oltage Regulator				Bipolar		
	127	0184 SS	1500 Ohms	100E-12 F	18 8524	1 FAILED	3500 N/R	102	252	13
LM311		NSC 1	1 Linear, Comparator	omparator				Bipolar		
	421	0184 SS	1500 Ohms	100E-12 F	2 8540	1 FAILED	300 PINS 2 AND 3	102	252	13
LM317		NSC S	2 Linear, Vo	Linear, Voltage Regulator				Bipolar		
	421	0184 SS	1500 Ohms	100E-12 F	15 N/R	1 FAILED	3000 N/R	102	252	55
LM318		NSC 2	2 Linear, Op	2 Linear, Operational Amplifier	fier			Bipolar		
	421	0184 SS	1500 Jhms 100E-12	100E-12 F	11 N/R	1 FAILED	2100 N/R	102	252	13
LM319		JSN	1 Linear, Co	Comparator				Bipolar		
	721	0184 SS	1500 Ohms	100E-12 F	7 8608	1 FAILED	800 PINS 4,5,98, AND 10	102	252	13
LM320		NSC.	2 Linear, Vo	Voltage Regulator	,			Bipolar		
	127	0184 SS	1500 Ohms	100E-12 F	18 8344	1 FAILED	3500 N/R	102	252	13

237.t <u>Numper</u> LM323		Pant ESD Mith Class NSC 2		Part Description Histor, Voltage Regulator				Technology Bipolar	X	}
	Test Source 421		Test Test Test <u>Date Type Resistance</u> 0184 SS 1500 Ohms	Test Capacitance 100E-12 F	Number Date Number Pulses Code Devices 18 8616	Test Result FAILED	Test Voltage Pin Combination 3500 N/R	failure Te Criteria Re	Test Ger Remarks Rem 252	General Remarks
LM324		NSC	Linear, C	Linear, Operational Amplifier	ifier			Bipolar	.	?
	121	3184 88	1500 Ohms	100E-12 F	2 8504	1 FAILED	250 INPUTS	102	252	13
EM32800		NSC 2	Linear					Bipolar		
	421	0184 SS	1500 Ohms	100E-12 F	15 N/R	1 FAILED	3000 N/R	102	252	13
LM339		NSC 1	Linear, Comparator	omparator				Bipolar		
	121	0184 SS	1500 Ohms	100E-12 F	3 8428	1 FAILED	600 INPUTS	102	252	13
LM340		NSC 3		Linear, Voltage Regulator				Bipolar		
	421	0184 SS	1500 Ohms	100E-12 F	40 8416	1 FAILED 1 FAILED	8000 N/R 8000 N/R	102 102	252 252	13
LM3524		NSC 1	Linear					Bipolar		
	421	0184 SS	1500 Ohms	100E-12 F	3 N/R	1 FAILED	600 PINS 1,2,4,5, AND 16	102	251	13
LM358		NSC 1	Linear, Op	Linear, Operational Amplifier	fier			Bipolar		
	421	0184 SS	1500 Ohms	100E-12 F	2 N/R	1 FAILED	250 PINS 2,3,5, AND 6	102	252	13
LM365		NSC 2	Linear, Comparator	mparator				Bipolar		
	421	0184 SS	1500 Ohms	100E-12 F	50 8404	1 FAILED	4000 N/R	102	252	13

Part		Part ESD	Part	c				Technology		1
Number LM393		NSC 1	Linear, Op	Linear, Operational Amplifier	fier			Bipolar		
	Test		Test	Test	Number Date Number Test	ber Test Test	St Trade Din Combination	Failure Test Criteria Remarks		General Remarks
	Source 421	ce <u>Date</u> Type 0184 SS	1500 Ohms	100E-12 F	7 8604	1 FAILED	7 8604 1 FAILED 1300 PINS 2,3,5, AND 6	102		13
LM398		NSC 2	Linear, Op	Linear, Operational Amplifier	ifier			Bipolar		
	421	0184 SS	1500 Ohms	100E-12 F	20 8512	1 FAILED	4000 PIN 8	102	252	13
LM4250		NSC 1	Linear, Op	Linear, Operational Amplifier	ifier			Bipolar		
	421	0184 SS	1500 Ohms	100E-12 F	4 N/R	1 FAILED	800 PINS 2 AND 3	102	252	5
LM567		NSC 1	Digital, D	Decoder				Bipolar		
	421	0184 SS	1500 Ohms	100E-12 F	7078 7	1 FAILED	750 PIN 6	102	252	13
LM592		NSC 1	Digital, M	Digital, Multivibrator				Bipolar		
	421	0184 SS	1500 Ohms	100E-12 F	3 N/R	1 FAILED	600 PIN 1 AND 14	102	252	13
LM628		NSC 1	Linear					Bipolar		
	421	0184 SS	1500 Ohms	100E-12 F	1 N/R	1 FAILED	100 PIN 26	102	592	13
LM723		FSC 1	Linear, Vo	Linear, Voltage Regulator	د			Bipolar		
	436	0788 SS	1500 Ohms	100E-12 F	7 N/R	2 FAILED	800 INPUT TO INPUT	2	252	м
	927	1186 SS	1500 Ohms	100E-12 F	18 N/R	2 PASSED	4000 N/R	\$	252	m

		General	Remarks 3	м	М	٣	мм	8	m		3	13		13		8		13
			Remarks Re 252	252	252	252	252 252	252	252		252	252		252		252		252
Technology	Bipolar	Failure Test	<u>Criteria Re</u>	5	\$	5	ω ν	2	2	Bipolar	\$	102	Bipolar	102	Bipolar	2	Bipolar	102
		Test	Voltage Pin Combination 1600 INPUT 10 GND	700 INPUT 10 INPUT	500 INPUT 10 INPUT	1000 INPUT 10 INPUT	4000 N/R 4000 N/R	3500 OUTPUT TO GND	1400 INPUT TO INPUT		4000 N/R	1200 PIN 4 AND 5		900 PIN 1 AND 14		3000 INPUT TO INPUT		400 PINS 2 AND 3
			Devices Result Vo	1 FAILED	2 FAILED	1 FAILED	2 PASSED 2 PASSED	2 FAILED	2 FAILED		5 PASSED	1 FAILED		1 FAILED		1 FAILED		1 FAILED
	or	Number Date Number Test	Pulses Code D	6 N/R	4 N/R	9 N/R	18 N/R	17 N/R	11 N/R	70.	18 N/R	6 N/R		5 8520	olifier	16 N/R	lifier	2 8420
c	Voltage Regulator	Test	Capacitance 100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	100E-12 F	Linear, Voltage Regulator	100E-12 F	100E-12 F	Multivibrator	100E-12 F	Linear, Operational Amplifier	100E-12 F	Linear, Operational Amplifier	100E-12 F
Part Description		Test	Resistance 1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	1500 Ohms	Linear, Vo	1500 Ohms	1500 Ohms	Digital, M	1500 Ohms	Linear, Op	1500 ОҺт	linear, Op	1500 Ohms
Part ESD Mfr Class		Test Test Test	e Date Type 1186 SS	1186 SS	1186 SS	1186 SS	1186 SS	1186 SS	1186 SS	NSC 1	0688 SS	0184 SS	NSC 1	0184 SS	RAY 2	1186 SS	NSC 1	0184 SS
(Cont.d)	1	Test	Source 436	736	927	9£7	436	927	436		736	421		421		436		451
Part	1									LM723			LM733		LM741A		LM741CN	

Part	Part ESD Part Mfr class Description	Technology		Ì
LM747A	1 Linear,	Bipolar		
	Test Test	Failure Test Criteria Rema	rk S	General Remarks
	16 N/R 1 FAILED			m
	436 1186 SS 1500 Ohms 100E-12 F 13 N/R 2 FAILED 1800 INPUT TO INPUT	5	252	٣
		1 0	252	m
LM747A	RAY 3 Linear, Operational Amplifier	Bipolar		
	436 1186 SS 1500 Ohms 100E-12 F 18 N/R 1 PASSED 4000 N/R	5	252	~
LM747A	NSC 1 Linear, Operational Amplifier	Bipolar		
	436 1186 SS 1500 Ohms 100E-12 F 14 N/R 5 FAILED 2000 INPUT TO INPUT	\$	252	8
LM747CN	NSC 1 Linear, Operational Amplifier	Bipolar		
	421 0184 SS 1500 Ohms 100E-12 F 3 N/R 1 FAILED 500 PINS 1,2,6, AND 7	102	252	13
LM781.05	NSC 2 Linear, Voltage Regulator	Bipolar		
	421 0184 SS 1500 Ohms 100E-12 F 12 8444 1 FAILED 2300 N/R	102	252	13
LM833	NSC 1 Linear, Operational Amplifier	Bipolar		
	421 0184 SS 1500 Ohms 100E-12 F 8 N/R 1 FAILED 1600 PIN 2 AND 6	102	252	13
LM835	NSC 1 Linear	Bipolar		
	421 0185 SS 1500 Ohms 100E-12 F 2 N/R 1 FAILED 400 PINS 2 AND 3	102	252	13

Part Number LMC13421		Part ESD Mfr Class NSC 2	Part SS Description 2 Linear, Switch	n i tch				Technology Bipolar		1
	Test Source	a)	Test Test Test Date Type Resistance	Jest Capacitance	Number Date Number Pulses Code Devices	Test	Test Voltage Pin Combination	Failure Test Criteria Remarks		General Remarks
	451	0184 SS	s 1500 Ohms	100E-12 F	N/R	FAILED	2500 N/R	102		13
LMC628		NSC	1 Linear					Bipolar		
	421	0184 SS	1500 Ohms	100E-12 F	1 N/R	1 FAILED	100 PIN 26	102	252	13
LMC660		NSC	1 Linear, Op	Linear, Operational Amplifier	ifier			Bipolar		
	421	0184 SS	1500 Ohms	100E-12 F	3 N/R	1 FAILED	500 INPUTS	102	252	13
LMC668		NSC	1 Linear					Bipolar		
	421	0184 SS	1500 Ohms	100E-12 F	8 N/R	1 FAILED	1500 PINS 1,2, AND 12-14	102	252	13
£MC669		NSC	1 Linear					Bipolar		
	421	0184 SS	1500 Ohms	100E-12 F	3 N/R	1 FAILED	600 PIN 2	102	252	13
LMC7660		NSC	2 Linear					Bipolar		
	412	0184 SS	1500 Ohms	100E-12 F	18 N/R	1 FAILED	3500 PINS 2-8	102	252	13
LMF100		NSC 1	1 Linear, Swi	itch				Bipolar		
	421	0184 SS	1500 Ohms	100E-12 F	5 N/R	1 FAILED	900 PINS 1-3,19, AND 20	102	252	13
LS129681		RAY 1	1 Digital, Memory, PROM	emory, PROM				STTL		
	431	N/R SS	1500 Ohms	100E-12 F	20 N/R	12 FAILED	900 PIN 23	110	252	13

Part Number (Cont'd) LSI29681	(p ₁	Part ESD Mfr Cla	SS -	Part <u>Description</u> Digital, Men	Memory, PROM				Technology STTL	λ	1
	lest	Test	Test	Test	Test		Number Test Te	المن المدم من	Failure Te Criteria Re	Test G	General Remarks
	Source 431	N/R	SS SS	1500 Ohms	100E-12 F	40 N/R	N/R 12 FAILED 1100	PINS 1 AND 2			13
	431	N/R	SS	1500 Ohms	100E-12 F	50 N/R	12 FAILED	1200 PINS 3,4,5,AND 22	110	566	13
	431	8/8 8/8	SS	1500 Ohms	100E-12 F	60 N/R	12 FAILED	1300 PIN 7	110	252	13
	431	N/R	SS	1500 Ohms	100E-12 F	70 N/R	12 FAILED	1400 PIN 6	110	252	13
	431	N/R	SS	1500 Ohms	100E-12 F	160 N/R	12 PASSED	22.8 PINS 9,10,11,12,AND 13	110	252	13
LT1001MJ8		LTC	-	Linear					Bipotar		
	438	0285 (N G	1500 Ohms	100E-12 F	10 N/R	5 FAILED	2000 IN TO V(-), IN(-) TO IN(+)	55	252	13
LT1002MJ		LTC	-	Linear					Bipolar		
	438	0585 GN	N.	1500 Ohms	100E-12 F	10 N/R	5 FAILED	2000 IN(A), IN(B), IN(A) TO V-A	55	252	13
LT1004MH-1.2		LTC	2	Linear					Bipolar		
	438	0385	N _S	150ն Ohms	100E-12 F	10 N/R	15 PASSED	2000 N/R	55	252	13
LT1005MK		110	-	Linear, Op	Operational Amplifier	Jifier			Bipolar		
	438	0385 GN	8	1500 Ohms	100E-12 F	10 N/R	4 FAILED 4 FAILED	2000 VIN TO VEN, VEN TO GND. 2000 VIN TO VEN, VEN TO GND.	55	252	£1
L11007AMJ8		717	2	Linear, Vo	Voltage Regulator	tor			Bipolar		
	438	0285 GN	S	1500 Ohms	100E-12 F	10 N/R	15 PASSED	2000 N/R	\$5	252	13

Part		Part ESD Mfr Class	Part Descript	ç				-0	;	
LT1009C2			Linear,	Operational Amplifier	lifier			Bipolar	×	1
	Test Source 438	Test ce Date 0386	Test Test Iype Resistance GN 1500 Ohms	Test <u>Capacitance</u> 100E-12 F	Number Date Number Test Pulses Code <u>Devices Resu</u> 10 N/R 10 FAILI	umber Test T <u>evices Result V</u> 10 FAILED	Date Number Test Test Code Devices Result Voltage Pin Combination N/R 10 FAILED 2000 ADJ. TO V(-), ADJ. TO V(+)	Failure Test Criteria Remai 55	rks 252	General Remarks 13
LT1009МH	Ċ.	5	_		;			Bipolar		
LT1010МН	85,4	U585 GN LTC	1500 Ohn 2 Linear,	ns 100E-12 f Voltage Regulator	10 N/R or	15 FAILED	2000 ADJ. TO V(-),V(+),V(-)-V(+)	55 Bipclar	252	5
	438	0385 GN	1500 Ohms	100E-12 F	10 N/R	15 PASSED	2000 N/R	55	252	13
LT1011М Н		רונ	1 Linear, Op	Linear, Operational Amplifier	ifier			Bipotar		
	438	0585 GN	1500 Ohms	100E-12 F	10 N/R	15 FAILED	2000 ALL PINS	55	252	13
LT1012МH		1 110	1 Linear, Vk	Linear, Voltage Regulator	r.			Bipolar		
	438	0385 GN	1500 Ohms	100E-12 F	10 N/R	2 FAILED	2000 IN TO V(-)	55	252	13
LT1013MH		1 110	1 Linear, Vo	oltage Regulator	Į,			Bipolar		
	438	0585 GN	1500 Ohms	100E-12 F	10 N/R	12 FAILED	2000 IN +/-,V-A,V-B,IN A AND B	55	252	13
LT1014ACJ		LTC 1	1 Linear, Vo	oltage Regulator	Ĺ			Bipolar		
	438	0485 GN	1500 Ohms	100E-12 F	10 N/R	15 FAILED	2000 ALL PINS	55	252	13
LT1024ACN		רדכ	1 Linear, Vo	oltage Regulator	۲			Bipolar		
	438	0585 GN	1500 Ohms	100E-12 F	10 N/R	1 FAILED	2000 IN TO V(-)	55	252	13

Part Number	ESD Part Class Descript		Technology	
L11032CJ	LTC 1 Linear, Operational Amplifier		Bipolar	
	Test Number Date	Test	failure Test General	
	ince Pulses Code	Devices Result Voltage Pin Combination	Remarks Remar	
	438 0585 GN 1500 Ohms 100E-12 F 10 N/R 8 FAILED	LED 2000 IN,STRB.,RESP. TO V(-)	55 252 13	
LT1033MK	LTC 2 Linear, Operational Amplifier		Bipolar	
	438 0385 GN 1500 Ohms 100E-12 F 10 N/R 15 PASSED	SED 2000 N/R	55 252 13	
LT1037MJ8	LTC 2 Linear		Bipolar	
	438 0385 GN 1500 Ohms 100E-12 F 10 N/R 15 PASSED	SSED 2000 N/R	55 252 13	
LT1055AMH	LTC 1 Linear		Bipolar	
	438 0485 GN 1500 Ohms 100E-12 F 10 N/R 7 FAILED	LED 2000 IN TO V(-)	55 252 13	
LT1055н8	LTC 1 Linear		Bipolar	
	438 0387 GN 1500 Ohms 100E-12 F 10 N/R 6 FAILED	(LED 2000 IN TO V(-), IN TO V(+)	55 252 13	
LT107.3	LTC 1 Linear, Operational Amplifier		Bipolar	
	438 C385 GN 1500 Ohms 100E-12 F 10 N/R 9 FAILED	LED 2000 IN TO V(-), IN TO OUT	55 252 13	
LT108H8	LTC 2 Linear, Operational Amplifier		Bipolar	
	438 0285 GN 1500 Ohms 100E-12 F 10 N/R 15 PASSED	SSEC 2000 N/R	55 252 13	
LT111AJ8	LTC ' Linear, Comparator		Bipotar	
	438 0785 GN 1500 Ohms 100E-12 F 10 N/R 6 FAILED	1LED 2000 IN TO V(-)	55 252 13	•

Pant Number LT117AH	Part Mfr LTC	ESD Class	Part <u>Descript</u> Linear,	ion Voltage Regulator				<u>Technology</u> Bipolar	X	1
	Test Tes	Test Test Test Date Type Design		Test Nu	Date	ber Test Te		Failure Test		General
	438 028	श र च श	0285 GN 1500 Ohms 10	100E-12 F 10	N/R	2 FAILED	2 FAILED 2000 PINS 1-2 AND 3-2	S5 55	252	13
LT113H8	LTC	-	Linear, Opera	Linear, Operational Amplifier	fier			Bipolar		
	438 0385	55 GA	1500 Ohms 10	100E-12 F	10 N/R	9 FAILED	2000 IN TO V(-), IN TO IN	55	252	13
ET118J3	110	-	Linear, Opera	Linear, Operational Amplifier	fier			Bipotar		
	438 128	1286 GN	1500 Ohms 10	100E-12 F	10 N/R	9 FAILED	2000 IN TO V(-), IN(-) TO IN(+)	55	252	13
LT119AH	110	7	Linear, Comparator	arator				Bipolar		
	438 028	0285 GN	1500 Ohms 10	100E-12 F	10 N/R	15 PASSED	2000 N/R	55	252	13
LT137АН	וזכ	2	Linear, V	oltage Regulator				Bipolar		
	438 028	0285 GN	1500 Ohms 10	100E-12 F	10 N/R	15 PASSED	2000 N/R	55	252	13
LT138AK	LTC	7	Linear, O	perational Amplifier	fier			Bipolar		
	438 0385	2 GN	1500 Ohms 10	100E-12 F	10 N/R	15 PASSED	2000 N/R	55	252	13
LT15CAK	LTC	2	Linear, Voltage Regulator	ige Regulator				Bipolar		
	438 038	0385 GN	1500 Ohms 10	100E-12 F	10 N/R	15 PASSED	2000 N/R	55	252	13
L11526J	LTC	-	Linear, Voltage Regulator	ige Regulator				11.		
	436 1186	1186 SS	1500 Ohms 10	100E-12 F	10 N/R	1 FAILED	1200 INPUT TO GND	5	252	۳,

Part	Part	t ESD	Part	ç				Technology		
LT317AK	170		Linear,	Voltage Regulator)r			Bipolar	:	
	Test Te	lest Test Test	Test	Test	Date	umber Test To	Test	Failure Test		General
	Source Da 438 05	Date Type 0585 GN	Source Date Type Resistance 438 0585 GN 1500 Ohms	Capacitance 100E-12 F	Pulses Code De 10 N/R	vices Result V	Devices Result Voltage Pin Combination 10 FAILED 2000 ADJ. TO VIN, ADJ. TO VOUT	55 252 55 252		13
LT3525AJ	LTC	-	Linear, Vo	Voltage Regulator	ř			Bipolar		
	50 8£7	0585 GN	1500 Ohms 100E-12	100E-12 F	10 N/R	4 FAILED	2000 IN-GND, IN(-)-IN(+), OSC-GND	55	252	13
LT3527AJ	LTC	-	Linear, Vo	Voltage Regulator	۲			Bipolar		
	438 05	0585 GN	1500 Ohms	100E-12 F	10 N/R	4 FAILED	2000 IN-GND, IN(-)-IN(+), OSC-GND	55	252	13
LTC1044CH	רזכ	-	Linear, Op	Operational Amplifier	lifier			Bipotar		
	438 03	0385 GN	1500 Ohms	100E-12 F	10 N/R	18 FAILED	2000 N/R	55	252	13
	438 02	0285 GN	1500 Ohms	100E-12 F	10 N/R	7 FAILED	2000 PINS 1-3,7-3,1-7,AND 6-3	55	252	13
MC14029B	MOT	-	Digital, Flip-Flop	Flip-Flop				CMOS		
	416 10	1086 SS	1500 Ohms	100E-12 F	1 N/R	10 FAILED	800 N/R	25	252	13
MC14520BCP	MOT	-	Digital, O	Digital, Counter/Divider	£			CMOS		
	416 09	0986 SS	1500 Ohms	1500 Ohms 100E-12 F	1 N/R	10 FAILED	800 N/R	52	252	13
MC145578	MOT	•	Digital, I	Digital, Register, Shift	₽-			SOWO		
	416 10	1083 SS	1500 Ohms	1500 Ohms 100E-12 F	3 N/R	10 FAILED	400 N/R	\$2	252	13

Part Number MC6850		Part ESD Mfr Class MOT 2	Part S Descripti 2 Digital,	on Transceiver, ACIA	.1A				17	1
	Test Sour 436	Test ce Date 1186	Test Test <u>Type Resistanc</u> SS 1500 Ohms	Test <u>Capacitance</u> 100E-12 F	Number Date Number Pulses Code <u>Devices</u> 15 8003	Test Result FAILED	Test Voltage Pin Combination 2500 INPUT TO GND	Failure Test Criteria Remai	ks 252	General Remarks 3
MC8087		INI	2 Digital,	Processing Unit, Central	, Central			MOS		
	927	1186 SS	1500 Ohms	100E-12 F	15 N/R	1 FAILED 2 FAILED	2500 INPUT TO GND 2500 INPUT TO OUTPUT	ν. ν.	252	mm
MCA1300PSJ		NSC 1	Digital,	Digital, Array, PGA				Bipolar		
	421	0184 SS	1500 Ohms	100E-12 F	5 N/R	1 FAILED	900 N/R	102	252	13
MCC40118F		SGS 1	Digital, Gate	Gate				CMOS		
	416	0184 SS	1500 Ohms	100E-12 F	3 N/R	10 FAILED	400 N/R	25	252	13
MCC4069UBF		SGS 1	Digital,	Inverter, Buffer	ر			SOWO		
	416	0284 SS	1500 Ohms	100E-12 F	3 N/R	10 FAILED	400 N/R	25	252	13
MD82C55A		HAR 3	. Digital, 1	Transceiver, In	ransceiver, Input-Output Port			CMOS		
	927	1186 SS	1500 Ohms	100E-12 F	18 8709	2 PASSED	4000 N/R	2	252	٣
MD82C55A		MOT 2	2 Digital, T		ransceiver, Input-Output Port			CMOS		
	739	1186 SS	1500 Ohms	100E-12 F	16 N/R	2 FAILED	3000 GND TO OUTPUT	'n	252	м
MF10		NSC 2	Linear					¥0S		
	421	0184 SS	1500 Onms	100E-12 F	15 N/R	1 FAILED	3000 N/R	102	252	13

	Part ESS Part Mrs. Class Description				Technology		1
;	, 25 %				SON		
	'est lest lest est lest	Date	Test	Test	Failure Test		ueneral
		Pulses Code 5 N/R	Devices Result Vo	Voltage Pin Combination 900 PIN 19	Criteria Re	Remarks Kem 252	Kemarks 13
7 4. 3	Legaco . OSA				S C ¥		
	Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Constitution of the Consti	9 2 1	€ 1 • • • • • • • • • • • • • • • • • • •	812 PINS 1,7,13, AND 14		252	13
40 3	- CERT				815013		
	- 51-3051 SMMS 0509 OPMS 150E-12 F	8/N	1 FACLED	1400 PINS 5 AND 6	102	270	13
**6553*	NSC : Digital, Memory, EPROM	Σ			SO ¥		
	.2' 018, SS 1500 0hms 100E-12 F	۲ ۲	1 FA:LED	200 N/R	102	252	13
2.452.7	NSC 1 Digital, Memory, EPROM	Σ			SOF.		
	-21 018. SS 1500 Ohms 100E-12 F	8/X	1 FAILED	203 N/R	102	252	13
4 8.554-3	wsc 1 Digital, Memory, EPROM	¥			₹		
	421 0184 SS 1500 Ohms 1UDE-12 F	1 N/R	1 FAILED	200 N/R	102	252	13
#K359+4	NSC 1 Digital, Memory, EPROM	¥			ž O S		
	.21 0184 SS 1500 Ohms 100E-12 F	2 N/R	1 FAILED	400 N/R	102	252	13
S &\$8.3	wsc ' bigital, Memory, EFROM	Æ			MOS		
	42* 0:84 S5 1500 Ohms 100E-12 F	7 N/R	1 FAILED	1400 N/R	102	252	13

Part Number MK359-6		Part ESD Mfr Class NSC 1	Part <u>Descripti</u> Digital,	on Memory, EPROM				Technology	97.	
	Tes	Test Test Test Test Source Date Type Resid	st Test De Resistance	lest	Number Date Number	lest	Test	Failure T	Test Ge	General
	127	0184 SS	1500 Ohms	100E-12 F	1 N/R	N/R 1 FAILED	200 N/R	Criteria Remarks Remarks 102 252 13	emarks Re 252	marks 13
MM5020		NSC 1	1 Digital					CMOS		
	7.5	0184 SS	O Ohms	125E-12 F	1 N/R	1 FAILED	200 N/R	102	586	13
MM5034			Oigital,	Converter, A/D-D/A	/A			CMOS		
	421	0184 SS	1500 Ohms	100E-12 F	3 N/R	1 FAILED	500 N/R	102	252	13
MM5051		NSC 1	l Digital					CMOS		
	725	0184 SS	O Ohms	125E-12 F	1 N/R	1 FAILED	200 N/R	102	289	13
MM5066		NSC 1	Digital					CMOS		
	÷21	0184 SS	1500 Ohms	100E-12 F	10 N/R	1 FAILED	2000 N/R	102	252	13
	755	0184 SS	O Ohms	125E-12 F	1 N/R	1 FAILED	200 N/R	102	289	13
MM5081		NSC 1	Digital					CMOS		
	421	0184 SS	1500 Ohms	100E-12 ′	10 N/R	1 FAILED	2000 N/R	102	252	13
	755	0184 SS	O Ohms	125E-12 F	1 N/R	1 FAILED	200 N/R	102	586	13
MM5387		NSC 1	Digital					MOS		
	421	0184 SS	1500 Ohms	100E-12 F	5 N/R	1 FAILED	900 N/R	102	252	13

Part								Technology	2	
Lacen X		Clas						SOM		
MM 54.57		 J SZ	บายาเลเ							
	Test	t Test Test	Test		Number Date Number		Test	Failure Te	rest Ge	General
	Sour	Source Date Type	Resistance	쐸	Pulses Code (Devices Result	Result Voltage Pin Combination			Remarks
	421	0184 SS	1500 Ohms	100E-12 F	2 N/R	1 FAILED	350 N/R	102	252	S L
MM5450		NSC 1	Digital					MOS		
	421	0184 SS	1500 Ohms	100E-12 F	4 N/R	1 FAILED	800 N/R	102	252	13
	725	0184 SS	0 Ohms	1^5E-12 F	1 N/R	1 FAILED	50 N/R	102	289	13
								ر 2		
MM5453		NSC 1	Digital					S E		
	.21	0184 SS	1500 Ohms	100E-12 F	3 N/R	1 FAILED	600 N/R	102	252	13
	421	0184 SS	1500 Ohms	100E-12 F	7 N/R	1 FAILED	1400 N/R	102	252	13
MM574080		NSC 1	^igital, M	icro Computer				CMOS		
	392	0886 ss	1500 Ohms	100E-12 F	5 N/R	5 FAILED 5 FAILED	500 INPUT PINS AND GND & VCC 700 INPUT PINS TO GND & VCC	19	249 153	13 13
MM58538		NSC 1	Digital					WOS		
	127	0184 SS	1500 Ohms	100E-12 F	2 N/R	1 FAILED	300 N/R	102	252	13
MM58539		NSC 1	Digital					¥0S		
	127	0184 SS	1500 Ohms	100E-12 F	1 N/R	1 FAILED	200 N/R	102	252	13
MM58540		NSC 1	Digital					MOS		
	124	0184 SS	1500 Ohms	100E-12 F	1 N/R	1 FAILED	100 N/R	102	252	13

Part Number		Part ESD Mfr Cla	×	Part Description	٥				- ,		
MM58548	}			Digital					Technol ogy MOS	760	
	Source	lest lest	Test Type			Number Date Number Test Pulses Code Devices Resul	mber Test	Test Number Date Number Test Test <u>Capacitance Pulses Code Devices Result Voltage Pin Combination</u>	failure Test Criteria Remarks		General Remarks
	421	0184	SS	1500 Ohms		1 N/R	1 FAILED	100 N/R	102		13
MM74HC4020		NSC	-	Digital, Memory	Метогу				COMH		
	755	0184 SS		O Ohms	125E-12 F	1 N/R	1 FAILED	200 N/R	102	289	13
MM74HC4538		NSC	-	Digital, Memory	Метогу				SOWH		
	755	0184	ss (0 Ohms	125E-12 F	1 N/R	1 FAILED	200 N/R	102	289	13
NMC27C32		NSC	2 0	Digital,	Digital, Memory, EPROM				CMOS		
	421	0184 8	SS 1	1500 Ohms	100E-12 F	20 N/R	1 FAILED	4000 N/R	102	252	13
	755	0184 8	o ss	0 Ohms	125E-12 F	3 N/R	1 FAILED	600 N/R	102	289	13
NMC61642		NSC	-	Digital, Memory	Метогу				MOS		
	421	0184 SS		1500 Ohms	100E-12 F	9 N/R	1 FAILED	1800 N/R	102	252	13
N9726JWN	_	NSC.	- 0	Nigital, P	Digital, Memory, EAROM, EEPROM	EEPROM			MOS		
	421	0184 \$	SS 1	1500 Ohms	100E-12 F	10 N/R	1 FAILED	2000 N/R	102	252	13
NS32082	-	NSC	1 0	iigital, F	Digital, Processing Unit, Central	t, Central			SOW		
	421	0184 SS		1500 Ohms	100E-12 F	10 N/R	1 FAILED	2000 N/R	102	252	13

Part		Part ESD Mfr Class	Part Description		Technology		i
NS455	İ		Digital,		MOS		
	Test	Test Test Test	Test Number Oate Number Test Test		Failure Test		General
	Sour 421	ce Date Type 0184 SS	stance Capacitance Pulses Code Devices Result Voltage Ohms 100E-12 F 10 N/R 1 FAILED 2000	Combination	Criteria Remarks 102 252		remarks 13
NS8040		NSC 1	Digital, Processing Unit, Central		MOS		
	421	0184 SS	1500 Ohms 100E-12 F 5 N/R 1 FAILED 900 N/R	I/R	102	252	5
0.1080.2		NSC 1	Digital, Processing Unit, Central		SOM		
	421		1500 Ohms 100E-12 F 8 N/R 1 FAILED 1600 N/R	4/R	102	252	13
C C C C C C C C C C C C C C C C C C C		WSC 1	Digital, Processing Unit, Central		MOS		
	451		· · ·	Z/R	102	252	13
					¥0S		
NS87P50		NSC 1			•	ç	Ç
	421	0184 SS	1500 Ohms 100E-12 F 8 N/R 1 FAILED 1500 N/R	N/R	102	797	5
	421	0184 SS	1500 Ohms 100E-12 F 10 N/R 1 FAILED 2000 N/R	N/R	102	252	13
NS913		NSC 1	Digital, Processing Unit, Central		¥0S		
	127	0184 SS	1500 Ohms 100E-12 F 6 N/R 1 FAILED 1200 N/R	N/R	102	252	13
	421	0184 SS	1500 Ohms 100E-12 F 9 N/R 1 FAILED 1800 N/R	N/R	102	252	13
70.00		, γα <i>α</i>	1 linear, Operat.onal Amplifier		Bipolar		
	727	1083 GA	1500 Ohms 100E-12 F 10 N/R 12 FAILED	2000 PINS 2-4,3-4,2-3,6-4, & 7-4	100	252	13

Part			Part							
0P07A		LTC 1	Descript Linear, (operationa, Amplifier	mplifier			Technology Bipolar	Х6.	
	Test	Test Test Test Test Source Date Type Resis	t Test e Resistance	Test Elabacitance	Number Date Pulses Code		Test	Failure		General
	£,	3 N/R GN	1500 Ohms		10 N/R		2000 IN(+) TO IN(-)	Criteria Remarks 55 252		Remarks 13
						1 FAILED	2000 IN(+) TO IN(-)	55	252	13
ОРО7АНВ		110 1		Linear, Operational Amplifier	plifier			Bipolar		
	438	1286 GN	1500 Ohms	100E 12 F	10 N/R	1 FAILED	2000 IN(-) TO IN(+)	55	252	13
0Р07н		רדכ ז	Linear, Og	Linear, Operational Amplifier	plifier			Bipolar		
	438	0285 GN	1500 Ohms	100E-12 F	10 N/R	3 FAILED	2000 IN(+) TO IN(-)	55	252	13
ЭР 16Сн		נוכ ז	linear, Op	Linear, Operational Amplifier	plifier			Bipolar		
	438	0385 GN	1500 Ohms	100E-12 F	10 N/R	10 FAILED	2000 IN TO V(-)	55	252	13
OP227EJ		רוכ 5		Linear, Operational Amplifier	plifier			Bipolar		
	738	0485 GN	1500 Ohms	100E-12 F	10 N/R	15 PASSED	2000 N/R	55	252	51
0P237AJ		רונ 5		Linear, Operational Amplifier	plifier			Bipolar		
	438	N9 5870	1500 Ohms	100E-12 F	10 N/R	15 PASSED	2000 N/R	55	252	13
0P27A		PRE 2	Linear, Op	Linear, Operational Amplifier	olifier			Bipolar		
	436	1186 SS	1500 Ohms	100E-12 F	16 N/R	1 FAILED	3000 INPUT TO GND	ν	252	m
0P27A		110 2	Linear, Op	Linear, Operational Amplifier	olifier			Bipolar		
	738	0587 GN	1500 Ohms	100E-12 F	10 N/R	15 PASSED	2000 N/R	55	252	13

	1	Part ESD	9	Part	_				Tech ology		i
0P27A	0 100			Linear, Ope	Linear, Operational Amplifier	lifier			Bipo r		
	Tect	Test Test Test	Toct		Test	Number Date Number Test		Test	Failure Test		General
	J. Co.	Co Date 1	1 27		itance	Pulses Code De	4	Voltage Pin Combination	Criteria Remarks	arks Rem	Remarks
	438	0687	3	438 0687 GN 1500 0hms	100E - 12 F	10 N/R	PASSED	2000 N/R	55	252	13
						,			Bipolar		
0P27AH8		<u>.</u>	7	Linear, upe	Linear, Operational Amplifier				_		
	738	1286 GN		1500 Ohms	100E-12 F	10 N/R	15 PASSED	2000 N/R	55	252	5
8H £40		717	~	Linear, Ope	2 Linear, Operational Amplifier	lifier			Bipolar		
	738	1286 GN		1500 Ohms	100E-12 F	10 N/R	15 PASSED	2000 N/R	55	252	13
P51C56		INI		Digital, Me	Memory, EAROM,	EEPROM			NMOS		
	428	N/R	3	1500 Ohms	100E-12 F	5 N/R	10 FAILED	1000 N/R	13	252	13
P8751H		<u> </u>	-	Digital, Pr	Processing Unit, Central	t, Central			HMOS		
	627	N/R		0 Ohms	50E-12 F	3 N/R	10 FAILED	300 N/R	13	237	13
	428	N/R	S.	1500 Ohms	100E-12 F	5 N/R	10 PASSED	1200 N/R	13	252	13
	627	N/R	N.	0 Ohms	50E-12 F	3 N/R	10 PASSED	600 N/R	13	237	13
PAL 10H8		PRE	-	Line: ', Array	гау				STTL		
	436	1186 SS	SS	1500 Ohms	100E-12 F	S N/R	1 FAILED	600 INPUT TO GND	'n	252	8
PA_10H8		MOM	-	Linear, Ar	ırray				STTL		
	736	1186 SS	SS	1530 Ohms	100E-12 F	4 N/R	1 FAILED	500 INPUT TO GND	5	252	٣

Part Number PAL12L10	Part ES	ESD F	Part <u>Description</u> Linear, Array	on rray				Technology STTL	ХБо	ļ
	Test Test Test Test Source Date Type Resistance 436 1186 SS 1500 Ohms	Test Test Test Date Type Resi 1186 SS 1500	Test Resistanc 1500 Ohms	Test <u>Capacitance</u> 100E-12 F	Number Date Number Pulses Code Devices 3 N/R 2	Number Test Devices Result 2 FAILED	Number Date Number Test Test Pulses Code Devices Result Voltage Pin Combination 3 N/R 2 FAILED 400 INPUT TO OUTPUT	Failure Test Criteria Remarks 5 252	Test Ge Remarks Re 252	General Remarks 3
PAL 16H2MJ	MOM	-	Linear, Ar	rray				STTL		
	436 1186	SS	1500 Ohms	100E-12 F	4 N/R	1 FAILED	500 INPUT TO OUTPUT	\$	252	23
PAL16L2	MOM	1 L	Linear, Ar	rray				STTL		
	436 1186 SS		1500 Ohms	100E-12 F	2 N/R	1 FAILED	300 INPUT TO OUTPUT	5	252	м
PAL16L8	NOW) L	Linear, Array	ray				STTL		
	436 1186 SS		1500 Ohms	100E-12 F	8 N/R	1 FAILED	900 INPUT TO GND	'n	252	٣
	436 1186 SS		1500 Ohms	100E-12 F	7 N/R	1 FAILED	800 INPUT TO GND	\$	252	м
PAL16L8A	MOM	1 L	Linear, Array	гау				STTL		
	436 1186 8	SS	1500 Ohms	100E-12 F	S N/R	1 FAII ED	600 INPUT TO GND	2	252	M
	436 1186 SS		1500 Ohms	100E-12 F	4 N/R	1 FAILED	500 VCC TO GND	5	252	m
PAL 16L88	MOM	- -	Linear, Array	ray				STTL		
	436 1186 SS		1500 Ohms	100E-12 F	7 N/R	1 FAILED	800 INPUT TO GND	5	252	m
PAL16R4	MOM	<u>-</u>	Linear, Array	гау				STTL		
	436 1186 SS		1500 Ohms	100E-12 F	4 8623	1 FAILED	500 INPUT TO GND	2	252	ю

Part		Part ESD	Part	c				Technology		!
PAL 16R6A			Linear,	Array				STTL		l
	Test	Test Test Test	t Test	Test	Number Date Number	Test	Test	Failure Test		ral
	Source	se Date Ivo	Source Date Type Resistance	Capacitance	Pulses Code Dev	Result	Voltage Pin Combination	Criteria Remarks	narks Remarks	rks
	736	1186 SS	1500 Ohms	100E-12 F	N/R	FAILED	600 INPUT TO GND	5	252	٣
				į				5111		
PALZURATU		NO.	Linear,	Array				,		
	736	1186 SS	1500 Ohms	100E-12 F	12 8643	1 FAILED	1600 INPUT TO OUTPUT	\$	26	٣
RC139		RAY 1	1 Linear, Co	Comparator				Bipolar		
	725	0783 GN	1500 Ohms	100E-12 F	10 N/R	3 FAILED 3 FAILED	2000 INPUT TO GND 2000 INPUT TO INPUT	100	252 252	13
	433	0783 SS	1500 Ohms	100E-12 F	12 N/P	5 FAILED	1000 PINS 6 TO 7	100	252	13
	433	078 3 SS	1500 Ohms	100E-12 F	20 N/R	1 FAILED	2000 PINS 4 TO 12	100	252	13
	433	0783 SS	1500 Ohms	100E-12 F	24 N/R	2 FAILED	2250 PINS 4 TO 12	100	252	13
	432	0783 GN	1500 Ohms	100E-12 F	10 N/R	6 PASSED	2000 N/R	100	252	13
RC143		RAY	1 Linear, Op	Operational Amplifier	olifier			Bipolar		
	432	0783 GN	1500 Ohms	100E-12 F	10 N/R	3 FAILED	2000 INPUT TO V(-) 2000 INPUT TO INPUT	100	252 252	13
	433	0783 SS	.500 ohms	100E-12 F	4 N/R	1 FAILED	500 PINS 5 TO 6	100	252	13
	433	0783 SS	1500 Ohms	100E-12 F	8 N/R	6 FAILED	750 PINS 3 TO 11, AND 5 TO 6	100	252	13
	733	0783 58	1500 Ohms	100E-12 F	12 N/R	3 FAILED	1000 PINS 3 TO 11, AND 5 TO 6	100	252	13
REFOICH		, 011	1 Lirear					Bipolar		
	827	0485 GN	1500 01.718	100E-12 F	10 N/R	10 FAILED	2000 IN TO GND, TRIM, AND OUT	55	252	13

Part Number		Part ESD Mfr Class	Part S Description	ç				-		
REF02CH								Bipolar	ZE	
	Tes	· Test Test		Test	Date		Test	Failure Test		General
	138 85,	30urce Date 1ype 438 0485 GN	26 Resistance 1500 Ohns	Capacitance 100E-12 F	Putses Code De 10 N/R	Devices Result v	Voltage Pin Combination 2000 IN TO GND, TRIM, TEMP, & OUT	Criteria Re	Remarks Rei 252	Remarks 13
RF9601		RAY 2	2 Digital, Re	Register, Shift				Bipolar		
	437	1083 GN	1500 Ohms	100E-12 F	10 N/R	12 PASSED	2000 N/R	100	252	13
RM4153		RAY 1	Linear, Ope	Linear, Operational Amplifier	ifier			Bipolar		
	437	1083 GN	1500 Ohms	100E-12 F	10 N/R	2 FAILED 13 PASSED	2000 PINS 11 TO 1 2000 N/R	100	252	13
RM9510C		RAY 2	Digital,	Register, Shift				TTL		
	437	1083 GN	1500 Ohms	100E-12 F	10 N/R	12 PASSED	2000 N/R	100	252	13
SCX6212QFU/N5		NSC 1	Digital,	Array, PGA				₩		
	421	0184 SS	1500 Ohms	100E-12 F	4 N/R	1 FAILED	800 N/R	102	252	13
SE140		N/R N		Linear, Voltage Regulator	·			TTL		
	620	N/R N/R	1500 Ohms	100E-12 F	1 N/R	1 FAILED	177676 N/R	102	188	13
561524.3		רבכ 1		Linear, Voltage Regulator	,			Bipolar		
	438	0285 GN	1500 Ohms	100E-12 F	10 N/R	12 FAILED	2000 CL-GND, IN-IN, CL-CL, OSC-GND	55	252	13
SG1525AJ		רוכ		Linear, Voltage Regulator				Bipotar		
	438	1286 GN	1500 Ohms	100E-12 F	10 N/R	3 FAILED	2000 IN TO GND., IN(-) TO IN(+)	55	252	13

Part	Part ESD Part Mfr Class Description	Technology
sc1526J	Linear, V	MOS
	Test Number Date	Failure Test General
	Source Date Type Resistance Capacitance Pulses Code Devices Result Voltage Pin Combination 436 1186 SS 1500 Ohms 100E-12 F 13 N/R 1 FAILED 1800 INPUT TO GND	5 252
111-54	TEX 3 Linear, Operational Amplifier	Bipolar
	436 1186 SS 1500 Ohms 100E-12 F 18 N/R 2 PASSED 4000 N/R	5 252 3
11.084	TEX 1 Linear, Operational Amplifier	Bipolar
	392 1086 SS 1500 Ohms 100E-12 F 1 N/R 5 FAILED 2000 FACH P	2000 FACH PIN TO 4 & 11 (+ -) 19 252 13
TP3020	NSC 1 Linear, Communications, Auto Dialer	Bipolar
	421 0184 SS 1500 Ohms 100E-12 F 3 N/R 1 FAILED 600 N/R	102 252 13
TP3040	NSC 1 Linear, Operational Amplifier, General Purpose	Bipolar
	421 0184 SS 1500 Ohms 100E-12 F 4 N/R 1 FAILED 800 N/R	102 252 13
TP3054	NSC 1 Linear, Operational Amplifier, General Purpose	Bipolar
	421 0184 SS 1500 Ohms 100E-12 F 4 N/R 1 FAILED 800 N/R	102 252 13
	422 0184 SS 0 Ohms 125E-12 F 1 N/R 1 FAILED 200 N/R	102 289 13
1P3120	NSC 1 Linear, Communications, Digital Interface	Bipolar
	421 0184 SS 1500 Ohms 100E-12 F 7 N/R 1 FAILED 1400 N/R	102 252 13

Part Number		Part ES Mfr Cl	ESD		Part Description	Ę						, cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad - cad	Ş	
193155		NSC	-	Digi	tal, (Contro	otter, Tir	Digital, Controller, Time Slot Assigner	ner			Bipolar	78.	
	Source 421	91	Test Type SS	Test Test Test Date Type Resi 0184 SS 1500	Test Resistance 1500 Ohms		citance -12 F	Number Date Number Pulses Code Devices 3 N/R	Test Result FAILED	Test Voltage 600	Test Voltage Pin Combination 600 N/R	Failure Test Criteria Remarks 102 252		General Remarks
	755	0184 SS	SS	0	Ohms	125E-12	:-12 F	1 N/R	1 FAILED	50	50 N/R	102	289	13
TP3320		MSC	-	Line	Linear, Co	ommun î	mmunications, Telecom	Telecom				Sipotar		
	421	0184 SS	SS	1500	1500 Ohms	100E - 12	-12 F	3 N/R	1 FALLED	500	500 N/R	102	252	13
1P5088		NSC	7		ar, Co	i mun i	Linear, Communications, Telecom	Telecom				Bipotar		
	421	0184	SS	1500	1500 Ohms	100E-12	-12 F	14 N/R	1 FAILED	2800 N/R	N/R	102	252	13
TP5116		NSC	-	Line	³r, Co	Ammun i	Linear, Communications, Telecom	Telecom				Bipolar		
	421	0184 SS	SS	1500	1500 Ohms	100E-12	-12 F	3 N/R	1 FAILED	009	600 N/R	102	252	13
x28256		XIC	2	Digit	:al, M	етогу	Digital, Memory, PROM					MOS		
	436	1186 SS	SS	1500	1500 Ohms	100E-12	-12 F	17 N/R	1 FAILED	3500	3500 INPUT TO GND	5	252	٣
xC401		N/R	М	Digit	Digital, Gate	ate						111		
	545	N/R	SS	100	Ohms	N/R		1 N/R	15 FAILED	52	52 OUTPUI(+) GND(-)	27	186	21
xC402		æ/R	٣	Digit	Digital, Gate	ate						111		
	572	Z/R	SS	100 Ohms	Ohms	<u>د</u> ک		N/R	15 FAILED	95	62 INJECTOR(+) INPUT(-)	27	186	21

Part Number		Part ESD Mfr Class	Part ESD Part Mfr Class Description	c				Technology		ı
7073		N/R 3	3 Digita!, F	Flip-Flop				-1		
	Source 245	Test Test Test Test Source Date Type Resi 245 N/R SS 100	Test Test Test Date Type Resistance N/R SS 100 Ohms	Test Numb <u>Capacitance Puls</u> N/R	Number Date Number Test Test Pulses Code Devices Result Volta 1 N/R 15 FAILED	er Test Tes <u>ces Result Vol</u> 15 FAILED	Test Test Test Test Test Number Date Number Test Test Source Date Type Resistance Capacitance Pulses Code Devices Result Voltage Pin Combination 145 N/R SS 100 Ohms N/R 1 N/R 15 FAILED 49 INJECTOR(+) INPUT(-)	Failure Test General Criteria Remarks Remarks 47 186 21	t General <u>parks Remarks</u> 186 21	ral 21
28581-10CMB		211	1 Digital, P	1 Digital, Peripheral Driver, Clock	CI ock			Bipolar		
	736	1186 SS	1500 Ohms	100E-12 F	1 N/R	1 FAILED	200 INPUT TO GND	5	252	M
	736	1186 SS	1500 Ohms	100E-12 F	8 N/R	1 FAILED	900 INPUT TO GND	5	252	8
	927		1186 SS 1500 Ohms	100E-12 F	3 N/R	1 FAILED	400 INPUT TO GND	5	252	2

END